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BLM DEMOGRAPHICS

1991 Baseline Data

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Table of Contents

I. INTRODUCTION 1
Purpose (1); Need (1); Nature of Analysis (2); Ideal Distribution (3); Definition of Terms (4)

II. EXECUTIVE SUMMARY OF ISSUES 5

III. BLM TOTAL DEMOGRAPHICS 7

IV. RETIREMENT ELIGIBILITY 9
The Big Picture (9); Variation by PATCO (9); Sex and Race (11); Education (13); Supervisory Status (13); Grade (15)

V. BULGES AND PINCHES 17
Where Bulges Come From (17); The Changing National Labor Force (18); Problems Caused by Bulges (19); Problems Caused by Pinches (19); Problems Get Worse Over Time (20); Solutions (20)

VI. TURNOVER 21
Turnover Defines Limit of Workforce Management (21); Rate Varies by Retirement Eligibility (21); Retirement Rate (21); Separation Rate (22); Total Change in 3 Years (25); Sex and Race (27); Education (27);

VII. PROFESSIONAL OCCUPATIONS 29
Overview (29); How to Read the Charts (31); Archaeology (33); General Biology (35); Range Conservationist (37); Forestry (39); Soil Scientist (41); Wildlife Biologist (43); Civil Engineer (45); Mining Engineer (47); Petroleum Engineer (49); Physical Scientist (51); Geologist (53); Land Surveyor (55)

VIII. ADMINISTRATIVE OCCUPATIONS 57
Overview (57); Details on Program Managers (59); Outdoor Recreation Planners (61); Environmental Protection Specialist (63); Miscellaneous Administrative and Program GS-301 (65); Computer Specialist (67); Program Manager (69); Program Analyst (71); Land Law Examiner (73); Public Affairs (75); Contracting Specialist (77); Realty Specialist (79); Inspections and Compliance Staff (81); Investigators (83)

IX. TECHNICAL OCCUPATIONS 85
Overview (85); Personnel Clerk (89); Forestry Technician (93); Engineering Technicians (95); Electronic Technician (97); Legal Instrument Examiner (99); Purchasing Agent (101); Cartographic Technician (103)

X. CLERICAL OCCUPATIONS 105
Overview (105); Miscellaneous Clerk and Assistant (107); Mail and File Clerks (109); Secretary (111); Clerk Typist (113); Legal Clerks and Technicians (115)

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XI. SUMMARY SUGGESTIONS 116
Overview (116); Departmental Assistance (116); Bureau Human Resource Management Office (116); Bureau Assistant Directors (117); Coordination of Recruitment and Selection (118); Appropriate Standards (118)

XII. BACKGROUND 119
Demographics Study Required (119); CSC Attrition Study (119); Civil Service 2000 (119); Departmental Demographic Studies (121); National Park Service Studies (122); BLM State Studies (124); Work Plan Approval (124); Congressional Request (125); Excluded Topics (125)

XIII. METHODOLOGY 126
Nature of the Problem (126); General Approach (126); Working Definitions (127); Retirement Eligibility (128); Recoding (128); SPSS Reports (128); Accuracy of Reports (128); Privacy (130); Major Occupations (130)

DEMOGRAPHICS STUDY

I. INTRODUCTION

A. Purpose

This report is the first phase in the Bureau of Land Management's (BLM) systematic analysis of staff demographic patterns. The study is undertaken to allow long term planning in human resource management, in response to a Congressional request, and in keeping with the Department of the Interior's Strategic Plan for Human Resources Management.

The goals of this phase of the analysis are:

1. to develop the methods for the study of workforce patterns, including working definitions of terms so that reliable data may be drawn from the PayPers data elements which were not designed for this type of analysis, and the mechanics of retrieving and assembling that data from the truly massive PayPers files so that the data can be tractable for analysis;

2. to provide an overview of the demographic patterns so that the subsequent phases of the study can proceed in a systematic manner, identifying what further work may be needed, any problem areas requiring immediate response, and the basic issues requiring management intervention and policy development; and

3. to identify the implications of fluctuations, with particular emphasis on the 'bulges' and 'pinches' in retirement eligibility for major BLM occupations, so that management is aware of the parameters of upcoming change and can plan appropriate action.

B. Need

The two basic resources of any organization are money and people, and both need planning and control. The control systems are well developed for both resources. But in most agencies (except the military) the planning systems are not as well developed for human resources as they are for financial resources.

Since 1987 the Department of the Interior Office of Equal Opportunity has provided demographic data to BLM: quarterly reports of gains, losses, and promotions; semi-annual reports by occupational series; and a yearly workforce profile. BLM uses this data to provide mandatory Quarterly Analysis/Assessment of EEO data to the Secretary. They also provide a workforce profile by PATCO and EEO groups, and briefings as requested. But the hard copy is voluminous, the format so difficult, and the data is not available on computer. As a result, in depth analysis is not provided nor is data by retirement eligibility.

The lack of more detailed analysis may not seem to be a problem during a period of growth, but during periods of stability or decline the demographic results of previous growth may come as a surprise. In addition, the demographic analysis which allows long term human resource planning also allows a more productive use of the staff. It makes it easier to assure that there will be the right number of people with the right grade and the right experience for the needs of each occupation. People are happier, healthier, and more productive when they are placed in a job that makes best use of their skills while not stifling their ambition with non-merit barriers including anomalies in the competitive pools or availability of vacancies in promotion paths. Providing such an environment requires planning, analysis, and management intervention.

The foundation for analysis presented in this study should allow BLM to start to plan and manage the human resource more systematically, with improved results for both the organization and the individual workers.

C. Nature of Analysis

This report is limited to the summary data for permanent staff. This data is broken out by PATCO (an acronym for the standard personnel categories of Professional, Administrative, Technical, Clerical, and Other -- other and wage grade or blue collar are not part of this analysis), by major occupations, and by the demographic variables of years to retirement eligibility, State, sex, race, grade, and education. The smaller subcategories within these variables have been grouped together so that the emphasis remains on the overview. For example, SESers are shown as GS 16, GS 6 and 7 have been combined, GS 8 and 9 have been combined, minority races have been combined, etc.

The retirement eligibility was calculated for each position whose tenure is 'permanent' for all career, career conditional, and SES staff. Voluntary retirement may be reached at age 55 with 30 years of service, age 60 with 30 years of service, or age 62 with 5 years of service. A calculation was made for each employee based on birth date and service computation date to see when the earliest threshold would be reached. Note that this calculation is of retirement eligibility, which is entirely objective, rather than a prediction of actual retirement dates, which are affected by a large number of individual subjective factors.

To highlight trends, most of the graphics in this report show percents rather than actual counts. Note that when percents of demographics of different sizes are compared, the differences in actual counts are hidden. For example, 7.9% of those with a PhD and 7.9% of those with no college degree are currently eligible to retire. While this is the identical proportion, the actual numbers are quite different because in total there are 36 times more BLM staff with no college degree.

This report makes no judgement regarding the proper number of staff. That should come from a needs analysis of land management work to be done and a workload analysis of the workforce needed to accomplish these needs. Similarly, the report makes no judgement regarding the proper number of staff by race and sex. The Federal government, the Department of the Interior, and the Bureau of Land Management have as goals that non-merit barriers to employment should be eliminated and that the workforce should be reflective of the comparable civilian labor force. For purposes of this initial report, it was decided to focus on straight descriptions of BLM with no comparison by occupation or PATCO category to the total Federal labor force or other outside standards.

To properly understand the data, review the methodology (section XIII of this report) for the working definitions, the recoding of personnel data elements to build those definitions, and the methods used to ensure data accuracy.

D. Ideal Distribution

The ideal distribution of demographics for an occupation depends on a number of variables. It is up to management to decide what that ideal should be, and it may be very different from occupation to occupation. Since this report provides the base data for the first time, such determinations by management are obviously not yet available.

As identified in the goals, the emphasis of this report is on bulges and pinches in retirement eligibility. Until management specifies a different ideal, each occupation will be treated as though a steady flow of candidates working their way "through the chairs" is desirable. This steady flow of candidates is best achieved with a fairly flat distribution by retirement eligibility. This is the "ideal" distribution shown as a straight line in the retirement eligibility charts of this report.

Since no judgement is made in this report about the proper number who should be working beyond retirement eligibility, the flat distribution is calculated by dividing the actual number not yet at retirement eligibility by the number of intervals being charted. For example, 7% of the total BLM workforce are working past retirement eligibility, leaving 93% working their way toward eligibility. If 5 year increments are shown, there will be 6 such increments in a normal 30 year projection. Thus the flat distribution for the total BLM workforce, is 93/6 or 15.5% per 5 year increment plus a 7% increment for those working past retirement eligibility.

If the reader believes that a distribution other than an even flow is desirable for a given occupation, the line showing the flat distribution should simply be regarded as a steady reference point. The data and analysis will remain unaffected.

Even when management identifies a steady flow of home grown talent as the ideal for a specific occupation, other patterns may be optimal for some portion of the employees in that occupation. Some employees may prefer to keep a lower grade than move locations to receive a higher grade or broader experience. Some employees may believe that their best career development is to gain experience in several different agencies. Some employees may feel their needs are best met by changing occupations. The analysis in this report does not recommend a lock step progression; rather it suggests that it is in the best interest of the organization (and most of the employees) for management to decide what the optimal workforce should be, let everyone know, and take active steps to bring it about.

As a practical matter, however, interviews in all of the BLM States have shown that most employees regard their own occupation as one where a steady flow of home grown talent is important, particularly since cogent plans for other distributions have yet to be put forth by management. There is great resentment when there is not a steady supply of top level jobs opening up through retirement. There is similarly great resentment when competition pools become so large that there are more excellent performers than can ever be promoted, bringing into question the career rewards of excellent performance. Similarly, there is great resentment that particular pools, because of a pinch, are so small that ill-qualified candidates are perceived to have been selected. In short, a large portion of employees assume that deviation from a fairly flat distribution reflects either poor management or management disregard for workers.

E. Definition of Terms

There is some potential for ambiguity in the terms, so this report uses the following conventions in language. Retirement refers to those who leave Federal employ after becoming retirement eligible. Separation refers to those who leave an agency by transfer, pre-retirement resignation, termination, or death. The combination of retirement and separation is called attrition, for brevity labeled "leave" in some charts, while new hires are labeled "new hire." (A more detailed working definition of "new hire" and "leave" is provided on page 25.) The frequency or rate at which incumbents leave and are replaced is called the turnover rate, usually a statistical statement. As a steady level for comparison, some bar charts showing the distribution of retirement eligibility also show a line of what a flat distribution would look like, for brevity labeled "ideal", which is a default recommendation pending management guidance for specific occupations.

II. EXECUTIVE SUMMARY OF ISSUES

Because of the spurt of hiring in the 1970s, BLM now has a bulge of employees who are 11-20 years from retirement eligibility, followed by a pinch of employees who are 21-30 years from retirement eligibility. Both the bulge and the pinch cause various problems, and untreated will continue as a sine wave of bulges and pinches by decade. How many vacancies should BLM target to move from bulge years to pinch years to even out the distribution by retirement eligibility?

This report suggests that workforce planning requires thoughtful targets from managers, and timely feedback systems to monitor progress in reaching the target distributions. Where should BLM assign responsibility for developing optimal workforce targets by occupation and for developing feedback systems?

In the last 3 years more than 1,500 permanent staff left BLM by retirement, separation, or death. The recruitment and selection of their replacements did not show any statistically significant change in race or sex, decreased the number of college degrees, and 39% of the new selections had retirement eligibility in what was already a bulge. It is estimated that more than 2,600 vacancies will occur in the next 5 years, sufficient to make substantial progress toward an optimal workforce. What measures should BLM take to ensure that recruitment and selection in the next 5 years results in progress toward the target workforce?

The comparisons by sex and race in this report are only to the BLM averages for the relevant PATCO category, a dubious standard. Nationwide and State averages by PATCO are available from EEOC, and geographic and occupation specific averages are available from demographic consultants. How should BLM acquire relevant standards for comparison? 1990 Census data will soon be available, and should be used as BLM's standard.

The following occupations show a high proportion of workers currently at retirement eligibility or reaching eligibility in the next 5 years: civil engineer, program manager, soil scientist, mining engineer, petroleum engineer, physical scientist, engineering technician, purchasing agent, and forestry technician. What special recruitment efforts should BLM make to prepare for this turnover?

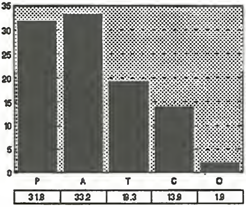
The following occupations show a low proportion of entry level workers (more than 20 years from retirement eligibility), still lower than the overall pinch in this age group: general biologist, soil scientist, forester, archaeology, environmental protection specialist, contracting, realty specialist, engineering technician, and electronics technician. What special recruitment efforts should BLM make to fill in the severe pinch in these occupations?

Goal 4 of the Department's Strategic Plan for Human Resources Management recommends starting a workforce analysis system. This current report provides baseline data and methodology for starting the analysis, but is not yet a system. What resources should BLM allocate (e.g., 1 senior analyst plus computer support) for in-depth workforce analysis?

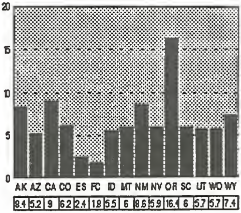
TOTAL PERMANENTS

All Figures In Percent

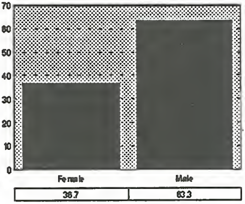
PATCO



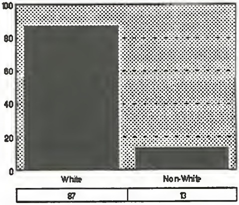
By States



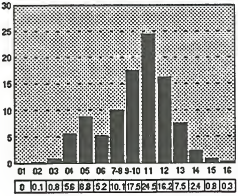
By Sex



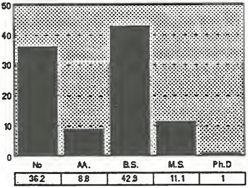
By Race



By Grade



By Degree



III. BLM TOTAL DEMOGRAPHICS

The tables on the opposite page show the demographics of BLM's total permanent workforce, broken out by six variables: PATCO categories, population by State (including the Washington Office, Service Center, and Fire Center), sex, race (with all minorities grouped together), grade level (with GS 7-8 combined, GS 9-10 combined, and SES combined as GS-16), and college degree ("No" means no college degree). This general format will be followed in a chart for each occupation.

Based on the working definitions (see section XIII), there were 9,015 permanent staff (not counting blue collar) in BLM when the data was drawn at the very start of 1991.

The staff are distributed in 15 State offices or equivalents. These offices may be thought of as occurring in four sizes: small, average, large, and extra large. The small offices are Eastern States and the Fire Center, each with about 2% of the staff. The average offices are Arizona, Colorado, Idaho, Montana, Nevada, Service Center, Utah, the Washington Office (prior to decentralization), and Wyoming, each with about 6% of the staff. The large offices are Alaska, California, and New Mexico, each with about 9% of the staff. And Oregon is substantially larger with more than 16% of the total BLM staff.

The workforce is about 63% male and 87% white. 55% of the workforce have a college degree, including 11% with a Masters and 1% with a PhD. The grade levels form nearly a bell shaped curve with GS-11 as the mode, with the distribution somewhat skewed toward the lower grades.

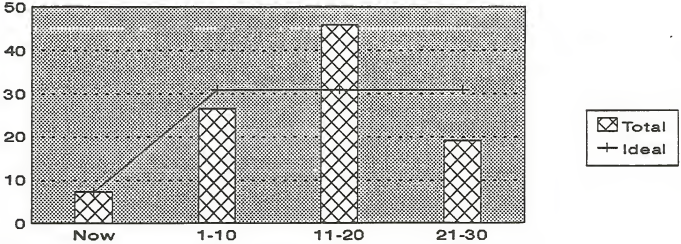
Professional and administrative positions are each about 32% of the total staff, while technicals are about 20% and clerical are about 14%. Blue collar workers are not part of this analysis, and thus not counted in the total.

The same six bar charts will be reviewed for the largest 37 occupations starting in section VII of this report. (Those charts will show years to retirement eligibility instead of PATCO, as most occupations are of a single PATCO category.) The occupation of personnel management, computer clerk, administrative officer, management analyst, and accounting technician were inadvertently left off the list for in-depth analysis even though they meet the threshold of 50 or more members.

Retirement Eligibility Overview

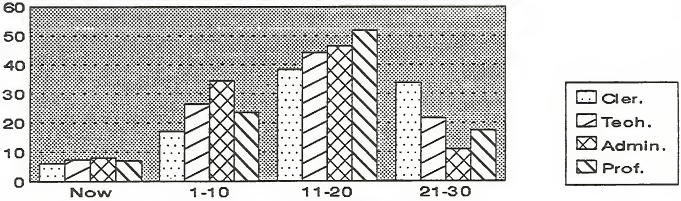
All Figures In Percent

Total By Decade Compared To Ideal



	Now	1-10	11-20	21-30
Total	7.3	26.4	45.8	19
Ideal	7.3	30.9	30.9	30.9

Total By Decade By PATCO



	Now	1-10	11-20	21-30
Cler.	6.2	17.2	38.5	33.7
Tech.	7.5	26.3	44.1	21.6
Admin.	8.1	34.6	46.3	10.9
Prof.	7.1	23.6	51.9	17.5

IV. RETIREMENT ELIGIBILITY

A. The Big Picture

The chart at the top of the opposite page gives a condensed picture of the retirement eligibility issue in BLM. For contrast, a line has been superimposed across the bars showing what a flat distribution would look like (allowing for those working past retirement eligibility). Setting aside the 7.3% who are working past retirement eligibility, the pattern is clearly a pinch followed by a bulge followed by a pinch.

Section V of this report shows that the general pattern of a bulge between two pinches primarily comes from a growth spurt in the 1970s, reinforced by the net impact of hiring selections to fill vacancies as they occurred. While the growth spurt led to better land management and a more robust agency, the pattern of growth also led to some surprising demographics issues such as unexpected booms and busts in retirement and hiring for some occupations, disproportionate competition pools, and clogged career paths. These in turn have probably caused secondary issues such as high mid-career turnover.

The emphasis in this report is not on identifying demographic problems and solving them but on laying out the base line data and analytic tools needed to approach the issues. After management settles on the desired workforce characteristics, the identification of problems and solutions will be relatively straight-forward.

B. Variation by PATCO

The chart at the bottom of the opposite page breaks out the number of staff reaching retirement eligibility by PATCO categories. Substantial variation is evident.

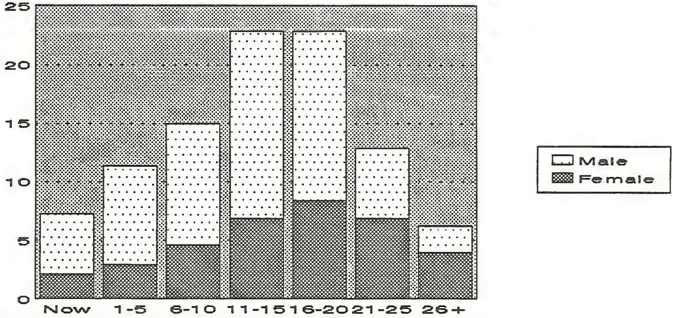
The clericals show a much more pronounced pinch in the coming decade, but are about at ideal for the third decade. The administrative category is high for the next two decades, but extremely low for the third decade. The technical staff is the only category that follows the average for the BLM total permanents, but as shown above this is a bulge and pinch cycle. The professional category follows the general pattern of the total, but shows stronger pinches and a higher bulge.

The substantial variation by PATCO category means that care must be taken in using aggregated workforce data which may obscure important highs and lows within the average. To prevent such a problem, most of the data for the remainder of the report will be broken out by PATCO or occupation, and will be broken into 5 year rather than 10 year increments so that the detail is more clearly visible.

BREAKOUT OF YEARS TO RETIREMENT ELIGIBILITY

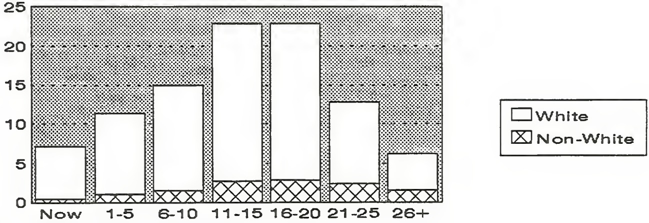
All Figures In Percent

By Sex



	Now	1-5	6-10	11-15	16-20	21-25	26+
Male	5.2	8.5	10.4	16	14.5	6	2.2
Female	2.1	2.9	4.6	6.9	8.4	6.9	4

By Race



	Now	1-5	6-10	11-15	16-20	21-25	26+
White	6.8	10.4	13.5	20.2	20.1	10.4	4.7
Non-White	0.4	1	1.5	2.7	2.8	2.4	1.5

C. Sex and Race

Males are almost two thirds of the BLM permanents, but their retirement eligibility is not evenly distributed. Two thirds of those currently eligible for retirement are male (an even distribution), almost three times as many males as females will become eligible in the next ten years, and in the second ten years it is back to an even distribution. But in 20 years this pattern reverses and more women than men will become retirement eligible.

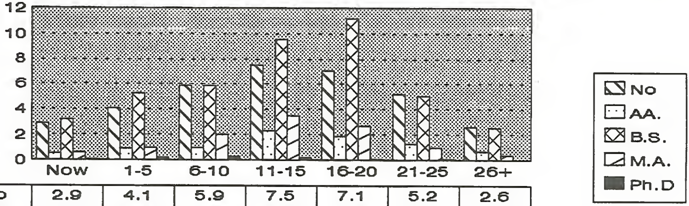
There is a somewhat similar pattern by race. Only 13% of the total BLM permanent workforce is minority, too few to be a majority of any of the five year groups shown in the chart on the opposite page. The middle decade shows a substantial increase in the number of minorities. The third decade in years from retirement eligibility shows a slight drop in the total number of minorities but an increase in proportion as there is a still larger drop in the number of whites. (In this report Spanish surnames are grouped as minority and the term "non-white" is used as a synonym for minority.)

The pattern described above is another way of saying that the older employees tend to be white male while the younger employees tend to be female and to include a larger portion of minorities. This crossover in retirement eligibility may be driven by some combination of several different trends: changing turnover rates by occupation, differing career patterns within PATCO categories, changes in recruitment efforts, changes in the labor force, differing rates of separation prior to retirement, and possibly other factors also. The way to determine the cause of change is to review the turnover on an occupation by occupation basis.

BREAKOUT OF YEARS TO RETIREMENT ELIGIBILITY

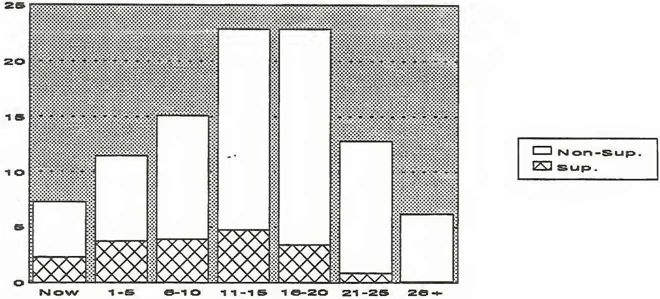
All Figures In Percent

By Education



	Now	1-5	6-10	11-15	16-20	21-25	26+
No	2.9	4.1	5.9	7.5	7.1	5.2	2.6
AA.	0.5	0.9	1	2.3	1.9	1.3	0.7
B.S.	3.2	5.3	5.9	9.5	11.2	5.1	2.5
M.A.	0.6	1	2	3.5	2.7	1	0.4
Ph.D	0.1	0.2	0.3	0.2	0.1	0.1	0

By Supervisory Status



	Now	1-5	6-10	11-15	16-20	21-25	26+
Non-Sup.	5	7.7	11.2	18.2	19.5	12	6.1
Sup.	2.3	3.7	3.9	4.7	3.4	0.8	0.1

D. Education

The data on education is more difficult to understand than the data on sex or race because there are so many more variables, each with its own pattern. In the top chart on the opposite page a pattern something like a bell shaped curve is evident for each level of education, but the shape of each bell varies.

The PhDs peak at 6-10 years from retirement, suggesting an older population, and essentially no replacement in the five years furthest from retirement. The masters degrees, associate degrees, and no college degrees all peak 11-15 years from retirement, and show a secondary peak 16-20 years from retirement, indicating a somewhat younger population. The bachelors degrees peak at 16-20 years from retirement, the youngest peak. But they drop significantly at more than 20 years from retirement, suggesting that proportionally fewer entry level bachelors degrees are being hired.

E. Supervisory Status

The chart at the bottom of the opposite page shows that approximately 4% of the staff are supervisors in each of the four increments from 1-20 years from retirement eligibility. It is expected that this proportion drops off significantly for those more than 20 years from retirement eligibility, as fewer of these employees have yet acquired the experience necessary to become supervisors.

While there is little change in the number of supervisors for the older two decades, the number of employees competing for the supervisory positions changes dramatically. In round numbers, there are:

years to retirement eligibility	employees per supervisory position
1 - 5	2
6 -10	3
11-15	almost 4
16-20	almost 6

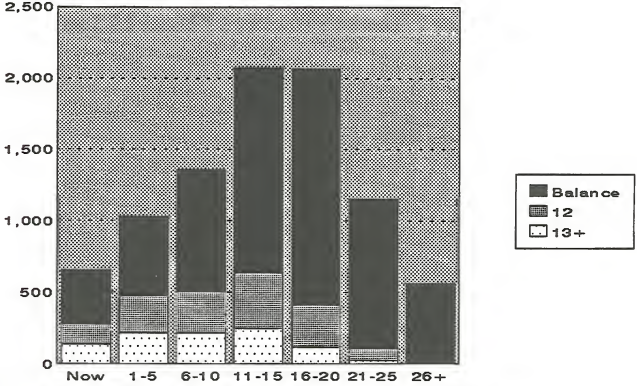
This illustrates the extra competition created by a bulge in retirement eligibility. From the standpoint of the employees in the bulge, their chances of being selected for a supervisory position for which they are eligible is two or three times smaller if they happen to be in the bulge.

It is worth noting that this issue will become more severe in a few years when the bulge is closer to retirement eligibility. Then the majority of the workforce will be in competition for a tiny number of senior supervisory positions.

BREAKOUT OF YEARS TO RETIREMENT ELIGIBILITY

Figures Show Actual Count

By Grade



	Now	1-5	6-10	11-15	16-20	21-25	26+
Balance	375	552	847	1,430	1,642	1,040	550
12	137	258	287	386	299	91	5
13+	142	220	222	252	120	25	4

As shown below in section VIII, the top managers (series 340) will have a high rate of retirement in the next few years. One good implication of the relatively flat distribution of supervisory status is that a fairly steady number of supervisors will remain in place after the retirement of the top managers. These younger supervisors may be called on to play a large role in providing stability during the transition of top managers.

F. Grade

The chart on the opposite page shows that competition for grades is affected by bulges and pinches in the same way as competition for supervisory positions, which is sensible since supervisors are usually higher grades.

There are 220-250 GS 13s and up in each 5 year increment from 1-15 years from retirement eligibility. There are about 300-400 GS 12s in each increment from 1-20 years from retirement eligibility. In short, there is not much variation in the number of higher grades by age, once people have 10 years of experience. But the number of people competing for these grades in each age group is dramatically different.

The following table shows how many people are competing for higher grades, broken out by retirement eligibility:

years from retirement eligibility	employees per GS-12 or higher position
1 - 5	almost 2
6 -10	2 and two thirds
11-15	3 and a quarter
16-20	almost 5

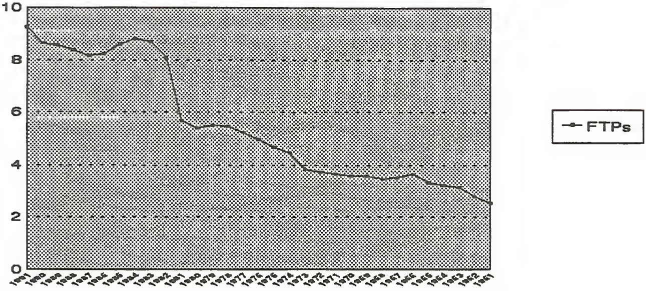
The individuals in the bulge face radically different competitive circumstances than do those in a pinch, entirely unrelated to their abilities. While it is expected that older workers with more experience will be more competitive for senior positions, the breakout by retirement eligibility tends to show employees competing with their peers for positions for which they all have equal experience.

The above analysis is only a rough measure -- it groups together too many occupations and too many factors. A full analysis of candidate pools compared to the number of supervisory and/or higher graded positions is well beyond the scope of this report. The table above is simply to illustrate the general issue of the impact of the bulge on individuals.

BUREAU OF LAND MANAGEMENT

Number of Full-Time Permanent Employees

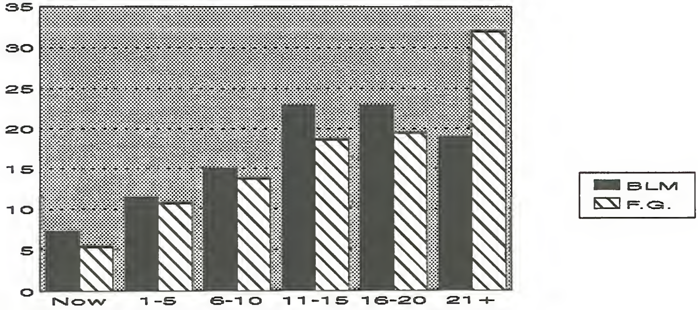
From 1961 Through 1991



BLM vs. Federal Government

Total Permanent Staff by Years To Retirement Eligible

All Figures In Percent



	Now	1-5	6-10	11-15	16-20	21+
BLM	7.3	11.4	15	22.9	22.9	19
F.G.	5.4	10.7	13.8	18.6	19.5	32

V. BULGES AND PINCHES

A. Where Bulges Come From

The major force determining the size of an agency workforce is the budget. When the budget goes up, more staff are hired. These staff tend to be a substantial distance from retirement eligibility.

The normal course of events is for the budget to remain relatively constant at the higher level for an extended period, rather than to continue growing at the same rate. In other words, there is a stable size, a growth spurt, and then a new stable size. But there is often little hiring immediately after the growth spurt because the vacancies are all filled and separation or retirement have not had time to produce many more. The growth spurt and the tendency to hire the same age produce a bulge in the distribution of staff at a given distance from retirement eligibility, with a pinch on either side.

As the chart on the opposite page shows, BLM was a fairly small agency with a modest growth rate until the mid-1970s when the Federal Land Policy and Management Act (FLPMA) was passed. This act provided "organic legislation" (pulled together many diverse and conflicting public laws and provided a central focus) and directed an emphasis on a full range of land management issues rather than emphasis on forestry and range conservation. New people with new skills were hired to fill the new responsibilities.

Up through 1973 BLM had fewer than 4,000 employees. In 1992 the employees who were in BLM in 1972 are now 20 years older. Some have already retired. The remainder make up the majority of the approximately 3,000 employees at or within 10 years of retirement eligibility. This is the pinch shown on the left of the bulge. No one who was in BLM in 1972 is more than 10 years from retirement eligibility.

After FLPMA passed, BLM roughly doubled in size with around 4,000 new positions. Around half of these new staff were hired as full-time permanent, and the other half were hired as WAE (When Actually Employed, a category of permanent, less than full time employment, often employed up to 50 weeks a year). In 1982 most WAEs were converted to permanent full time which is how they had essentially been used all along. The sudden jump between 1981-82 is thus only a bookkeeping change rather than new recruitment. The recruitment actually occurred in a short period of time during the late 1970s. In 1992 the employees hired during that concentrated spurt are now 10-15 years older. Some have left, but the remainder make up the majority of the approximately 4,000 employees who are 11-20 years from retirement eligibility. This is the bulge.

In 1983 on-shore minerals staff were transferred from the Minerals Management Service (MMS) into BLM. These staff tended to be of a similar, older age because they were a senior field level of specific work rather than the full range of the MMS. The result is they were no younger than the people who BLM hired during their growth spurt. In short, they made the bulge a little worse, and increased the numbers in the older decade, but did not add to the pinch of younger employees.

By 1987 the total population had dropped from its 1984 high by almost 700 positions, but by 1991 had gained around 1,100 from the 1974 low. Some of these 1,000 new hires have left, but the remainder of those hired during the 1980s make up the majority of the approximately 1,700 employees who are 21 or more years from retirement eligibility, the pinch shown on the right of the bulge.

There has been some blurring of the pattern because of turnover and new hiring. In recent years there has not been a great deal of retirement because those reaching retirement eligibility are mainly those from the much smaller pre-1975 BLM. As shown below (section VI on Turnover) the new hires are not much different from those they replace, including age. The result is that the demographics of the current organization continue to reflect the earlier hiring pattern.

In about 10 years the individuals hired during the spurt will be reaching retirement, which will dramatically increase the number of retirements and thus the number of vacancies to hire younger workers. The basic demographic issue facing BLM is whether to perpetuate the bulge and pinch sine wave by hiring same age employees or to purposefully invest the vacancies as they occur to reach a flatter distribution.

B. The Changing National Labor Force

Changes in the civilian labor pool do not drive the size of the organization. However the labor pool does have a large effect on the difficulty or ease of recruitment for whatever vacancies become available, and may influence the age and other demographics of the workers available when turnover produces vacancies.

The hiring spurt occurred just prior to baby boom workers becoming a major force in the national labor pool. Thus the age distribution in BLM is somewhat older than the distribution for the total Federal workforce (see bottom chart on page 16; Federal workforce data provided by Office of Actuaries, United States Office of Personnel Management). The general conclusion is that the baby boom has not yet had a major impact on BLM.

A similar trend has been found in the Park Service. In addition, a study conducted by the Department of the Interior Office of Personnel (published as Personnel Management Bulletin No. 84-47), showed that a bulge in administrative staff throughout the Department was older than the baby boom.

There are a multitude of forces which shape the civilian labor pool. The OPM study Workforce 2000 and countless other recent studies have detailed the huge impact of the baby boom on the national labor force, and the changes in race, language and education of workers immigrating to fill in the baby bust.

OPM's study suggests that when BLM's growth-spurt employees finally retire, the pool from which replacements may be drawn will be substantially different from the pool at the time the spurt was hired. BLM may face a fairly sudden transition when the bulge retires. BLM may be able to assist other agencies in making a smoother transition by keeping careful track of the issues they encounter in the sudden transition.

C. Problems Caused by Bulges

1. In a bulge, there are so many qualified people competing for the few promotions that many well qualified people simply have to be passed over. This is a loss to management because it results in losing the potential of the passed over workers. And it results in staff frustration and resentment because it becomes essentially impossible to get promoted.

2. Since all the individuals in a bulge by definition retire about the same time and tend to hold a disproportionate number of the highest grades, the result can be that a major portion of the senior staff leave at once. This can have serious implications in areas where experience, technical skills, or continuity are important.

3. A bulge inevitably results in a pinch some years later, as there are obviously not enough staff to make each age group larger than average.

D. Problems Caused by Pinches

1. Those in the pinch suffer the effects of having the bulge over them. There are so many older, more experienced, and thus more highly qualified candidates in the bulge that they appropriately receive most of the promotions. The result is that the younger applicants in the pinch do not get the opportunity to move 'through the chairs' to gain the experience needed to make them qualified.

2. When the bulge retires, a few of those in the pinch suddenly move up rapidly and encumber senior grades from which they do not retire for many, many years, causing problems for the career path of those in the subsequent bulge.

3. The remainder of those in the pinch have not accumulated the experience to move into the sudden large number of vacancies. This forces the agency to fill senior positions from the outside, further frustrating those in the pinch who have already been kept from promotions because of the size of the bulge.

E. Problems Get Worse Over Time

A demographics study (PMB No. 84-47) showed that if workload is increasing without an increase in staff, any vacancies are likely to be used to hire someone at full performance level rather than a trainee. This usually means an older employee. If there is already a bulge of older employees, the new worker will be about the same age as those already in the bulge. In other words, in the absence of management action, the natural tendency is for the pattern of bulges and pinches to get worse rather than to attenuate over time. This leads to a 'sine wave' of disproportionate representation, and perpetual problems.

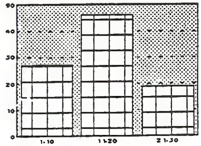
The charts below show the sine wave as it works its way through the retirement eligibility. For simplicity these charts assume that all turnover occurs through retirement, all new hires are entry level, and no one works past retirement eligibility. Obviously the real world is more complex than this, but this does not greatly reduce the impact of the bulge. Currently the pressure of the bulge is felt by mid career employees, leading to frustrations and high turnover. In ten years the pressure increases as those in the bulge realize that they will never fulfill their career aspirations; but it is too late to change careers. In twenty years there will be difficulties getting college to suddenly produce large numbers of graduates in fields that have gone decades without significant employment, and a high turnover among new employees when they realize there is intense competition for the few promotional opportunities.

F. Solutions

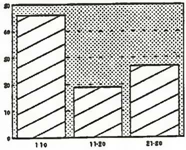
In very broad terms, the solution to a sine wave of bulges and pinches is for management to strategically use vacancies to fill in the pinch, and the solution to under-representation is for management to manage how the vacancies are filled.

Techniques to even out a bulge may include: informing those in a bulge of the circumstances so that they can make their own career adjustments; identifying occupations with a pinch that staff in occupations with a bulge can enter to improve their career prospects; providing retraining and assistance in changing occupations; assisting individuals in bulge occupations who desire early retirement; and most importantly managing the filling of vacancies to ensure that demographic imbalances are corrected rather than reinforced. These solutions are most effective and least disruptive if accomplished over several years with considerable attention to individual needs. One of the purposes of the analysis in this report is to provide the lead time necessary for this slow correction.

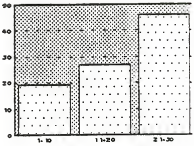
1991



2001



2011



VI. TURNOVER

A. Turnover Defines Limit of Workforce Management

The practice of workforce management is essentially the prudent management of where vacancies are filled and who fills them. Assuming no growth in the size of the organization, the attrition rate (retirement plus separation) defines the maximum number of vacancies, which thus defines the maximum rate of change in the population of the organization for sex, race, retirement eligibility, and to a great extent, education. As a practical matter, turnover thus defines the mathematical limit of the rate of change which can be brought by workforce management.

Various management practices will increase or decrease turnover, with the result that management has some control in defining the mathematical limit. The discussion below looks at some of the demographic issues that define the turnover.

B. Rate Varies by Retirement Eligibility

In BLM about 500 people have left the organization and been replaced each year for the last three years, roughly a 5% turnover rate.

The turnover rate varies greatly by retirement eligibility. There is 20% turnover each year of those currently eligible, about 4% turnover for those 1-15 years from eligibility, 5% at 16-20 years, 6% at 21-25 years, and 8% at 26+ years from retirement eligibility. The retirement rates for each five year increment may stay fairly steady over time. But the number of people this represents, and thus the total turnover rate for the organization, will change as the number of people in the various retirement eligibility increments changes.

This means that the overall turnover rate will go down as the bulge moves into the last decade before retirement eligibility. Turnover would then dramatically increase, driven both by the bulge retiring and the high turnover of entry level employees recruited to fill the resulting vacancies.

As shown below, the practical impact of turnover is currently nowhere near the 5% potential change each year, because the people who are hired are so similar to those who leave.

C. Retirement Rate

In the last three years, only 25% of the separations from BLM occurred by retirement (by definition all of these were retirement eligible). There are great differences between the PATCO categories on the number of people currently at retirement eligibility: 37% are administrative, 31% are professional, but only 20% are technical, and 12% are clerical. In round numbers, this means 450 people in professional and administrative categories are retirement eligible, but only 200 in clerical and technical fields.

In other words, retirement is currently a more significant source of turnover in professional and administrative categories, because these groups currently have older populations. But, contrary to popular opinion, retirement is not the major source of turnover for any PATCO category.

D. Separation Rate

73% of the separations from BLM occurred by transfer, resignation, or termination (25% from retirement as discussed above and the remaining few from death). The lowest rate of separation is the 10 years closest to retirement eligibility. This means that the majority of the turnover occurs in early or mid-career.

The early studies of demographics (see section on XII) showed that most of the separations occur in the first three years of a career. This is when people have a chance to see if the work and the agency actually suit them. Thus a high rate of recruitment is needed to produce a moderate flow of individuals into the fourth year of their career. In short, high turnover in the first few years is a fact of life, although the rate is higher for clerical than professional.

There are some careers where there may be no alternative to a high turnover rate even past the first three years. It is possible, for example, that individuals planning a career in law enforcement may find it easier to gain an entry level position in BLM than in the FBI, and then plan to transfer to another agency when they become eligible for grades higher than BLM can offer. Indeed, this may allow an affirmative recruitment strategy in such circumstances.

While it is usually desirable to do so, an agency is not required to provide a career path for employees. This is a complex issue, one that is not well served by over-simplifying the best interests of either the agency or the diversity of employees in an occupation.

But in the final analysis, the costs of recruitment, formal training, on the job training, and the organizational learning necessary in the early years of a career add up to a substantial cost to provide a steady flow of seasoned workers. For this reason, high turnover rates in mid-career should be reviewed from a cost avoidance standpoint and from the standpoint of whether this turnover is furthering or hindering the development of an ideal workforce for that occupation.

Projected Vacancies Over 5 Years

Series	Occupation	Pop.	Leave	Series	Occupation	Pop.	Leave
PROFESSIONAL				**TECHNICAL**			
193	Archaeology	132	18	203	Pers. Clerk	114	55
401	Gen. Biology	433	73	455	Range Tech.	169	43
454	Range Con.	428	97	462	Forestry Tech.	209	35
460	Forestry	347	87	802	Eng. Tech.	290	63
470	Soil Sci.	56	22	856	Elect. Tech.	68	27
486	Wildlife Bio.	228	38	963	Legal Exam.	128	53
810	Civil Eng.	91	33	1371	Cartog. Tech.	182	52
880	Mining Eng.	64	18	1105	Purch. Agent	69	20
881	Petro. Eng.	105	28	All Others		509	120
1301	Physical Sci.	69	18	Total		1738	468
1350	Geologist	285	70				
1373	Land Survey	322	57				
All Others		303	135				
Total		2863	640				
ADMINISTRATIVE				**CLERICAL**			
23	Outdoor Rec. Planner	193	28	303	Misc. Clerk & Asst.	221	87
28	Env. Prot. Spec.	83	15	305	Mail & File Clerk	109	78
301	Misc. Admin.	408	110	318	Secretary	364	193
334	Computer Spec.	315	70	322	Clerk Typ.	159	105
340	Program Mgr.	280	55	986	Legal & Cler. Tech.	166	72
345	Program Analy.	72	15				
965	Land Law Exam.	358	97	All Others		231	140
1035	Pub. Affairs	86	35	Total		1250	675
1102	Contract	94	25				
1170	Realty Spec.	330	67	**Other**	All	168	148
1801	Inspec. Comp.	103	12				
1811	Investigator	56	7				
All Others		618	196				
Total		2996	732				
BLM TOTAL		9015	2,663				

The calculations assume: 1) the number working beyond retirement eligibility remains constant; and 2) the separation rate remains constant, not changing as larger proportions get closer to retirement when separations normally reduce.

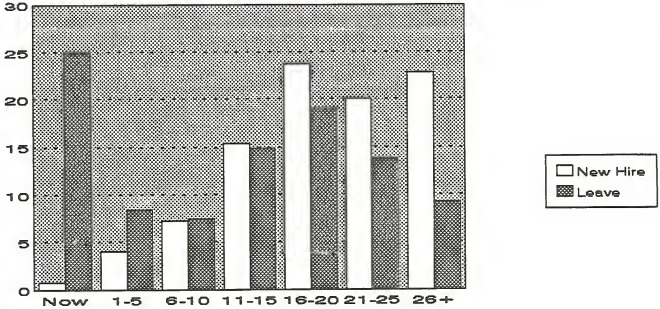
Obviously both assumptions can be questioned. Thus the above table should be seen as the best rough and ready approximation available until a more scientific model can be developed.

The "All Others" refers to the occupations not included in those listed, usually because there were fewer than 50 full-time permanents. A few occupations that meet this threshold were inadvertently left out of the detailed analysis. "Other" refers to a PATCO category with a high turnover which was not analyzed in this report.

A flat distribution by retirement eligibility would be expected to produce 20% turnover by retirement every 5 years plus almost another 10% turnover from attrition, primarily in the new hires.

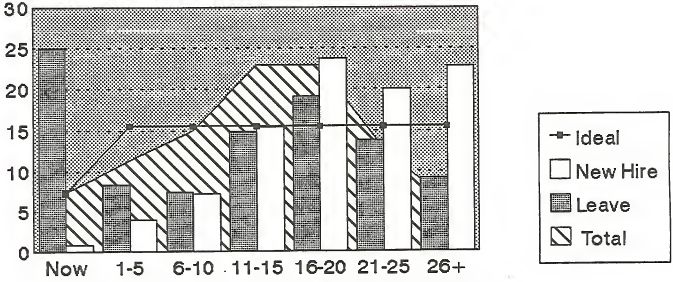
Total Change in 3 Years

By Retirement Eligibility



New Hire	0.8	4	7.2	15.4	23.7	20	22.8
Leave	25	8.4	7.4	14.9	19.1	13.8	9.2

Compared To Total Employment



Ideal	7.3	15.5	15.5	15.5	15.5	15.5	15.5
New Hire	0.8	4	7.2	15.4	23.7	20	22.8
Leave	25	8.4	7.4	14.9	19.1	13.8	9.2
Total	7.3	11.4	15	22.9	22.9	12.8	6.2

E. Total Change in 3 Years

The chart at top of the opposite page shows turnover broken out by retirement eligibility. In this study, "hire" is defined as a personnel transaction coded with a Nature of Action (NOA) code of 100-199. This includes the various subcategories of appointments, transfers, mass transfers, reinstatement, and excepted appointments (schedule A, B, and C), for permanent, full time employees. It excludes returns to duty from non-pay status, conversions to appointments, promotions, extensions, change in duty station, reassignments and all miscellaneous actions such as awards or changes in insurance. "Leave" is defined as a personnel transaction coded 300-399. This includes retirement, resignation, removal, death, termination, discharge, and numerous subcategories. It excludes placement in non-pay or non-duty status and the various position changes listed above. There may be some slippage in the counts because of the excluded categories, but this conservative definition seemed safest.

Almost 50% of the new hires are at least 15 years from retirement, suggesting that there is the potential of many productive years of service after the training period. But 34% of the separations come at mid-career, a potential issue for cost avoidance.

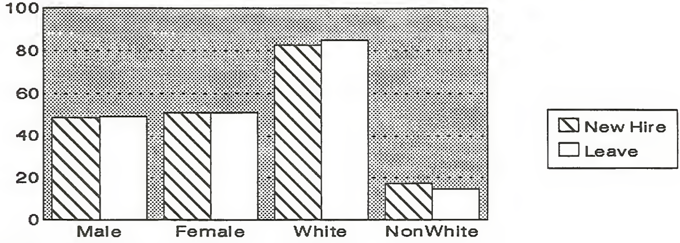
The chart at the bottom of the opposite page shows in a nut shell the overall demographic picture in BLM and the impact of the last three years of turnover on the overall picture. For this reason it is the graphic used on the cover of this report.

This chart projects the data from the upper chart onto the total retirement eligibility (all figures are in percent, but note that the base numbers are different). This projection shows that 39% of new hires have a retirement eligibility that falls in the bulge at 11-20 years from retirement eligibility. While this is essentially a one-to-one replacement of the separations, these hires may represent a lost opportunity to smooth out the bulge and increase the pinch in younger employees.

A Department-wide study of administrative staff (see section XII) indicated that when workload goes up managers may feel they must hire at the journeyman level and can not afford the investment in entry level staff. The general issue requires review on an occupation by occupation basis, but there is at least the potential for a long term problem caused by short term gains.

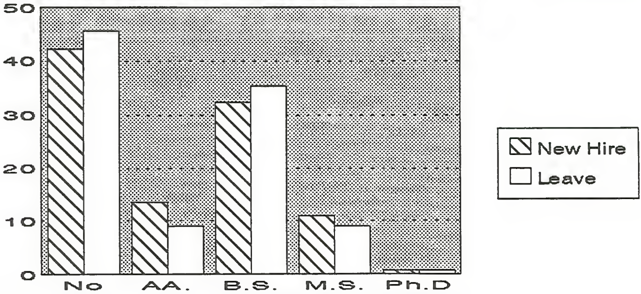
Total Change In 3 Years

By Race and Sex



	Male	Female	White	NonWhite
New Hire	48.9	51.1	82.5	17.5
Leave	49	51	85	15

By Education



	No	AA.	B.S.	M.S.	Ph.D
New Hire	42.3	13.6	32.5	11	0.7
Leave	45.7	9.1	35.5	9	0.7

F. Sex and Race

Over the last 3 years approximately 1,500 people have left and been replaced. BLM has placed great emphasis on recruiting and selecting women and minorities. Their rate of hiring is reported to be among the best in the Department. Specifically, there have been significant improvements in the number of minority legal examiners and more females in general biology. However, significantly more males have been hired as purchasing agents and in inspection and compliance.

For the total BLM population, three years of turnover has resulted in no statistically significant change in race and sex. If statistically significant change in the representation of women and minorities is to be accomplished then additional management guidance and more timely feedback on the net impact may be necessary.

G. Education

Over the last 3 years the turnover has resulted in a statistically significant change in the education level, although that change is complex and very small. At the lower end of the education scale, there was a reduction in the number of people with no college degree and an increase in those with associate degrees, significantly influenced by land surveyors and legal instrument examiners. At the middle range of education, there are fewer bachelors degrees and more masters degrees, including significant improvements in the education of mining engineers, general biologists, natural resource specialists, and contracting officers. The percent of PhDs has stayed even.

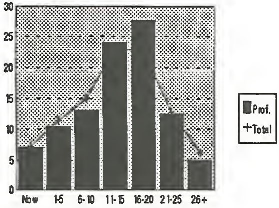
This change looks fairly positive on the face of it, but a review of the actual numbers is somewhat less positive. There was a net reduction of about 80 individuals with no college degree, and a net increase of about 50 individuals with associates degrees, primarily the change in surveyors, contracting and examiners. There was a net loss of about 100 bachelors degrees, a net gain of 16 masters degrees, and a net loss of 1 PhD. This is a total net loss in college degrees. (The "float" of conversions to permanent from individuals hired prior to the three years being reviewed here would provide some minor variations for the total for any year, but in the long run this is insignificant.)

We are currently in a recession, when well educated workers should be easier to hire. With the changes in the available labor pool projected in Workforce 2000, it may be that greater efforts are needed now to recruit college degrees while they are still available.

PATCO PROFESSIONALS

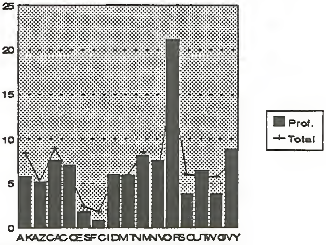
All Figures In Percent, Comparison To All Employees

Years To Retire Eligible



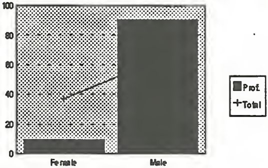
	Now	1-5	6-10	11-15	16-20	21-25	26+
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5
Total	7.3	11.4	15	22.9	22.9	12.8	6.2

By States



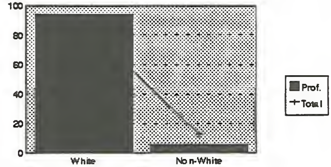
Prof.	5.6	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21	3.8	6.4	3.8	8.9
Total	8.4	5.2	9	3.2	2.4	1.8	5.9	6	8.6	5.9	16	6	5.7	5.7	7.4

By Sex



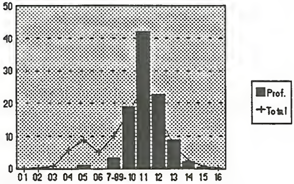
	Female	Male
Prof.	9.6	90.4
Total	36.7	63.3

By Race



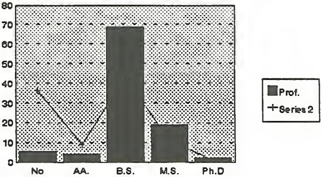
	White	Non-White
Prof.	94.1	5.9
Total	87	13

By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
Prof.	0	0	0	0	1	0	3.5	19	41.8	22.8	9	2.2	0.6	0
Total	0	0.1	0.8	5.8	8.8	5.2	10.1	17.9	24.9	16.2	7.5	2.4	0.8	0.3

By Degree



	No	AA.	B.S.	M.S.	Ph.D
Prof.	5.7	4.3	69	19	2
Series 2	36.2	8.8	42.9	11.1	1

VII. PROFESSIONAL OCCUPATIONS

Overview

BLM had 2,863 individuals in the PATCO category of professional at the time the data was drawn. This total is slightly less than the number in the administrative category, approximately 1,000 larger than the number in the technical category, and 1,600 larger than the number in clerical. A total of 12 professional occupations have more than 50 members, the threshold for detailed occupational analysis in this report. The smaller professional occupations such as social science, economist, geography, history, sociology, ecology, botany, fishery biology, mechanical engineering, museum curator, and numerous others have not been described in detail here but are included in the summary data about professionals.

The organizational distribution of professionals favors "on the ground" work: in round numbers, approximately 100 are in the Washington Office and in the Service Center, 600 are in State Offices, 650 are in District Offices, and 1,200 are in Resource Areas. The distribution between States is similar to the other PATCO categories, with the exceptions that the proportion of professionals is substantially higher in Oregon (with the largest number of foresters and also the most Resource Areas), but lower in Alaska, the Service Center and the Washington Office (which do not have Resource Areas).

Of the 2,863 professionals, 274 are female and 168 are minority, smaller proportions than in the other PATCO categories. The education of professionals is substantially higher than other PATCO categories: only 10% of the professionals have less than a four year college degree (primarily land surveyors), while 69% have a Bachelors, 19% have a Masters, and 2% have a PhD. The grades of the professionals are substantially higher than the other PATCO categories: less than 5% of the professionals are below GS 9, more than 40% are GS 11, 22% are GS 12, 9% are GS 13, and about 3% are GS 13 or higher. 18% of the professionals are supervisors (note that those who move into manager positions are reclassified in the 340 series which is not grouped as a PATCO professional).

The distribution of professionals by retirement eligibility is approximately the same as other PATCO categories -- a bulge between two pinches -- with the slight variation that there are proportionally more professionals 16-20 years from retirement. 200 professionals (7%) are currently eligible for retirement and an additional 300 (10.5%) will become eligible in the next 5 years. This suggests that a significant recruiting effort will be needed to replace these individuals.

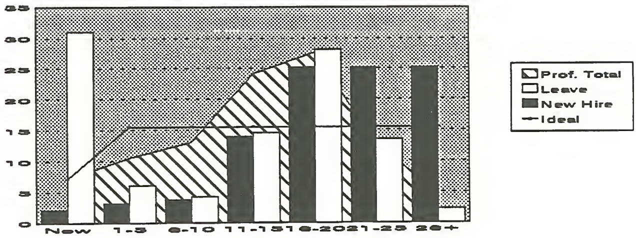
In the last 3 years 288 new professionals have been hired and 384 have left. 31% of those leaving the organization in the last 3 years were eligible for retirement, but 59% were more than 10 years from retirement, suggesting that most of the turnover is in mid-career. 76% of the new hires were at least 15 years from retirement, but almost 40% were of an age that was already a bulge.

The new employees have brought little statistically significant change in demographics. The general biologists have increased the number of masters degrees and the number of females, the one physical scientist hired has better education than those leaving, the new engineers are better educated, and the new land surveyors are much better educated than those leaving although the average is still low. It may be reasonable to ask if sufficient emphasis is given to EEO recruitment and selection.

The employees in the professional category average slightly younger than the administrative category, more concentrated in the middle years than the technicals, but significantly older than the clericals. This means that in total the professionals have about an average number of people about to retire, but there are some significant exceptions by occupation. 15% of the civil engineers are currently eligible to retire, and an additional 25% in the next 5 years, tied with Program Manager for the most rapid turnover in the near term. In addition, mining engineers and petroleum engineers both have 10% currently at retirement eligibility, suggesting that a substantial effort to recruit engineers may be needed. Soil scientists and physical scientists also have 10% currently eligible for retirement, suggesting a similar issue.

The lowest proportion of entry level people (more than 20 years from retirement eligibility) is found in general biology (4%), soil scientists (7%), and foresters (10%). In a flat distribution these groups would each be at 33%, suggesting that greater recruitment efforts may be needed to provide an even flow of these professionals. By contrast, 54% of the petroleum engineers are 20 years from retirement eligibility, which will create a significant bulge in competition for the promotion and supervisory positions for which they qualify.

There are also areas where a disproportionate number of people are competing for the available grades. The archaeologists and the wildlife biologists show a significant bulge in the middle years, while the range conservationists, foresters, wildlifé biologists, and geologists show a bulge in the youngest decade. This may be a factor of older staff holding the higher grades.



How to Read the Charts

The format of the 7 charts shown above will be repeated for each occupation and PATCO category. The formats were designed to make large quantities of complex data as easily understandable as possible. A great deal of data is compressed into them. The following explains what to look for where.

Unless stated otherwise, all figures are in percent so that the emphasis is on the proportions rather than the exact count. Be careful to note the base from which the percent is calculated. The percent scale is marked on the vertical axis, and the categories are labeled on the horizontal axis. The first line of the narrow box at the bottom shows the percents displayed by the bars; the second line shows the percents displayed by the line which gives the comparison. The labels show what category is being presented. The box at the right repeats the labels and identifies which is the bar and which is the line.

Almost all charts provide a comparison to the BLM standard, drawn as a thin line. In the six standard demographic charts, occupations are compared to the PATCO total and PATCO totals are compared to the BLM total permanent staff excluding wage grade. In the turnover charts, the comparison is to a flat distribution holding constant those working past retirement eligibility.

Note that the comparisons to the various averages are not value judgements. It is entirely possible that an occupation could be precisely at the average for both its PATCO category and the BLM average, yet be significantly at variance from the ideal distribution selected by management and/or national labor force characteristics. Or deviate from the average but meet the management ideal. Or any other permutation. Variation from an average may be for sound reasons. An obvious example is that there are a disproportionate number of foresters in Oregon because BLM has the most forest land there. A more subtle example is that larger occupations will tend to be lower graded because there are not enough grade supporting higher level duties for more than a few employees at any one location.

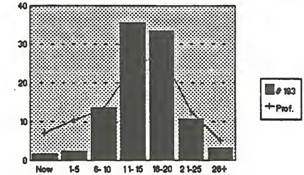
The *six standard demographic charts* show the retirement eligibility, States, sex, race, grade, and college degree. The retirement eligibility charts show one column for those who are currently eligible for retirement and one column for each five year increment of eligibility. The other five charts follow a similar format but show their respective categories as labeled.

The *standard turnover chart* shows the total of three years of separations and new hires broken out by the seven standard increments of distance from retirement eligibility. New hires are normally shown as black bars and separations are shown as white bars. In the background is a shape filled with slanted lines. The filled shape is identical to the bars in the Years to Retire Eligible chart in the group of six demographic charts, but is drawn this way so that it is more easily differentiated from the turnover bars.

GS-193, Archaeology

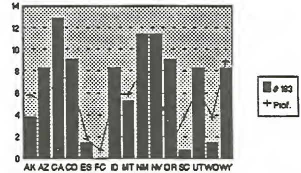
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



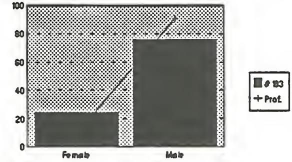
# 193	1.5	2.3	13.8	35.8	33.3	10.8	3
Prof.	7.1	10.5	13.1	24.1	27.8	12.5	5

#193 By States



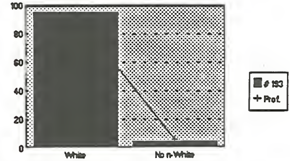
# 193	3.8	8.3	12.9	9.1	1.5	0	8.3	5.3	11.4	11.4	9.1	0.8	8.3	1.5	8.3
Prof.	5.8	5.2	7.8	7.1	1.8	0.8	6	5.9	5.1	7.8	1.1	3.8	3.4	3.8	8.9

#193 By Sex



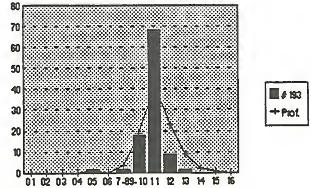
# 193	24.2	75.8
Prof.	9.6	90.4

#193 By Race



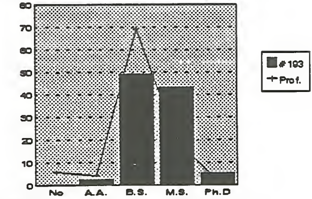
# 193	95.5	4.5
Prof.	94.1	5.9

#193 By Grade



#193	0	0	0	0	1.5	0	1.5	18.2	68.2	9.1	1.5	0	0	0
Prof.	0	0	0	0	1	0	3.5	19	41.5	22.8	9	2.2	0.6	0

#193 By Degree



#193	0	2.3	49.2	43.2	5.3
Prof.	5.7	4.3	69	19	2

Archaeology

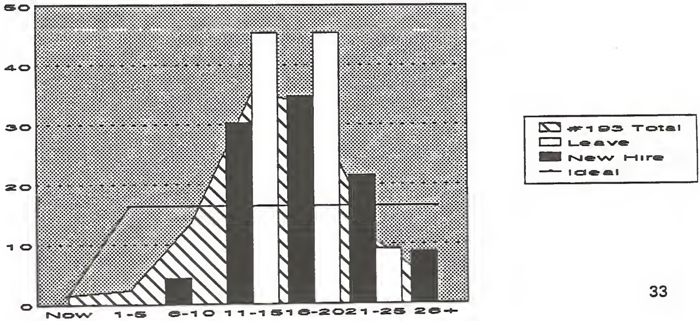
BLM had 132 archaeologists at the time the data was drawn. This number of employees is the 7th largest of the 12 professional occupations with more than 50 employees, around 100 less than wildlife biologists and 30 more than petroleum engineers.

The organizational distribution strongly favors "on the ground" work: 60% are in Resource Areas, 27% in District Offices, 8% in State Offices, and 2% at the Washington Office. The distribution between States is substantially at variance with other professionals: there is a somewhat higher proportion of archaeologists than the average for professionals in California, New Mexico and Nevada, and a lower proportion in Alaska and the administrative offices.

There are 32 female and 6 minority archaeologists, more than double the average proportion of women but slightly below the average proportion of minorities for all professionals. Archaeologists are dramatically better educated than the average professional, with 43% holding Masters degrees and 5% holding a PhD. 68% of the Archaeologists are GS 11, but substantially fewer than other professionals are at higher grades. No archaeologist is a supervisor.

Almost 70% of the archaeologists will become eligible for retirement in 10-20 years, a substantial bulge with a pinch on both sides: only 5 archaeologists are currently eligible for retirement or will become so in the next 5 years, substantially fewer than average for professionals, while somewhat fewer than average will be eligible in 20-30 years.

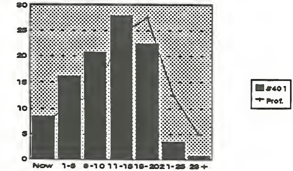
In the last 3 years, 23 archaeologists have been hired and 11 have left, bringing about a statistically significant increase in the number of males. 65% of the new hires have been of the same age as the bulge in retirement eligibility. 55% of those leaving have been more than 15 years from retirement and none of them was close to retirement. Most of the archaeologists, and most of the turnover, are in the middle years.



GS-401, General Biology

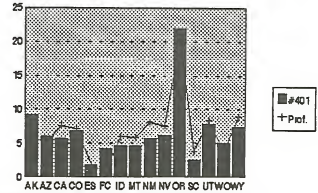
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



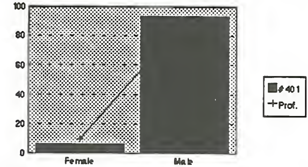
	Now	1-5	6-10	11-15	16-20	21-25	26+
#401	8.5	16.2	20.8	27.8	22.4	3.5	0.7
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#401 By States



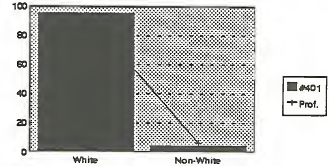
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#401	9.2	6	5.8	6.9	1.8	4.2	4.6	4.6	5.8	6.2	21	2.5	7.9	5.1	7.4
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21.	3.8	8.4	3.8	8.9

#401 By Sex



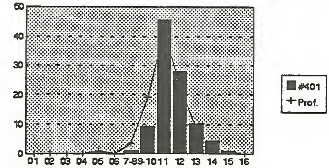
	Female	Male
#401	6.2	93.8
Prof.	9.6	90.4

#401 By Race



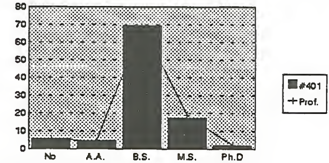
	White	Non-White
#401	95.6	4.4
Prof.	94.1	5.9

#401 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#401	0	0	0	0	0.2	0	1.2	9.2	45.7	28.2	10.2	4.4	0.9	0
Prof.	0	0	0	0	1	0	3.5	19	41.9	22.9	9	2.2	0.6	0

#401 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#401	6	4.8	69.5	17.6	2.1
Prof.	5.7	4.3	69	19	2

General Biology

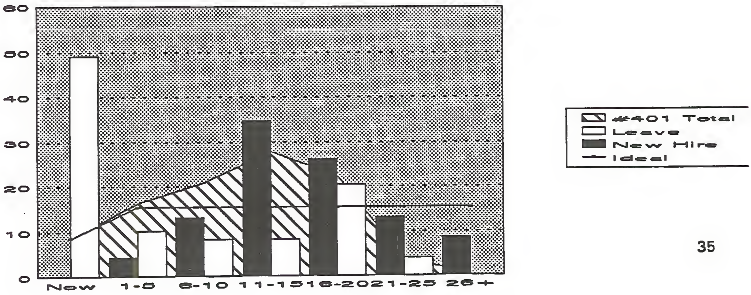
BLM had 433 general biologists at the time the data was drawn. This is the largest of the 12 professional occupations with more than 50 employees.

The organizational distribution of general biologists favors "on the ground" work, although not as strongly as other professions. There are 36% in Resource Areas, 25% in District Offices, 17% in State Offices and 5% or less at the Washington Office, Service Center and Fire Center. The distribution between States is similar to the average for all professionals, although there are slightly more general biologists in Alaska, the Fire Center and the Washington Office, and slightly fewer in most of the rest of the offices.

There are 27 female and 19 minority general biologists, a somewhat lower proportion than for all professionals. General Biologists are very close to the trend of all professionals for education, with 70% holding a BS, 18% holding an MS and 2% holding a PhD. The grade distribution is slightly higher than average for all professionals, with a lower proportion of GS 7-9 general biologists and a higher proportion of GS 11, 12, 13, and 14s. 30% of the general biologists are supervisors.

Although there is a bulge of retirement eligibility in 11-15 years, compared to other professionals the general biologists have a relatively flat distribution of retirement eligibility over the next 20 years. But only about 4% are in the 20-30 years from retirement eligibility, a dramatic pinch suggesting that trainees are not being added.

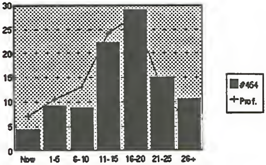
Over the last 3 years, there have been 23 new hires, and 49 losses, a pattern suggesting decline. This turnover brought a significant improvement in education and the number of females. Nearly half of those leaving were eligible for retirement, but 25% were more than 15 years from retirement. 74% of the new hires have been at an age where there is currently a bulge in retirement eligibility, while only 22% have been in the pinch of more than 20 years to retirement. This suggests that replacement is at the journeyman level, probably because many are for multidisciplinary supervisory jobs.



GS-454, Range Conservationist

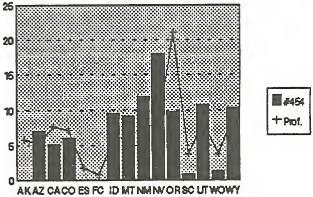
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



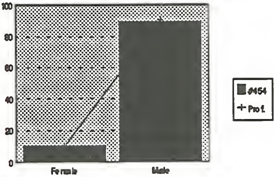
#454	4.4	9.3	8.9	22.2	29	15	10.5
Prof.	7.1	10.5	13.1	24.1	27.8	12.5	5

#454 By States



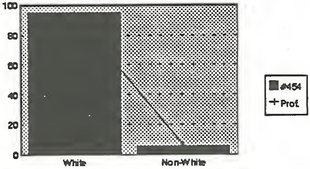
#454	0	7	5.1	6.1	0	0	9.6	9.1	11.	18	9.8	0.9	10.	1.4	10.
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21.	3.8	8.4	3.8	8.9

#454 By Sex



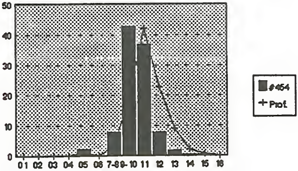
#454	10.5	89.5
Prof.	9.6	90.4

#454 By Race



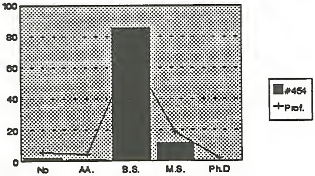
#454	94.6	5.4
Prof.	94.1	5.9

#454 By Grade



#454	0	0	0	0	2.3	0	7.7	42.	36.	7.9	1.9	0.2	0.2	0
Prof.	0	0	0	0	1	0	3.5	19	41.	22.	9	2.2	0.8	0

#454 By Degree



#454	1.9	0.9	85.5	11.7	0
Prof.	5.7	4.3	69	19	2

Range Conservationist

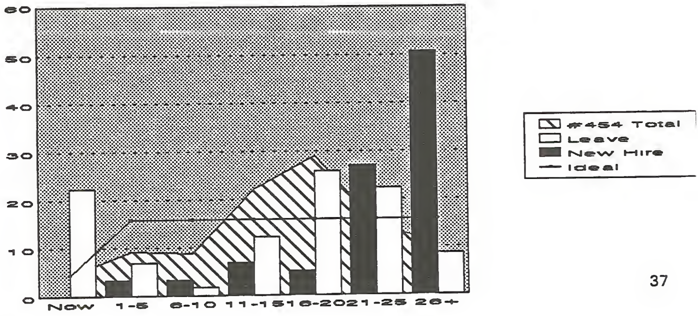
BLM had 428 range conservationists at the time the data was drawn. This is the second largest of the 12 professional occupations with more than 50 employees, just a few employees smaller than general biology.

The organizational distribution strongly favors "on the ground" work: 80% are at the Resource Area level, 13% at District Offices, 5% at State Offices, and less than 2% at the Washington Office. The distribution between States is substantially different than the average for all professionals: there are substantially fewer range conservationists than average in Alaska, Oregon, Eastern States, the Fire Center, the Service Center or the Washington Office, while substantially more in Nevada.

There are 45 female and 23 minority range conservationists, essentially identical to the average proportion for all professionals. 86% of the range conservationists have a Bachelors degree; fewer than average for other professionals hold either an advanced degree or no college degree. The grades are lower than average for all professionals: nearly double the average proportion are GS 7s and 9s while half the proportion are GS 12s and up. (See discussion of larger occupations on page 31). 17% of the range conservationists are supervisors.

The distribution of retirement eligibility follows the same general pattern of all professionals -- a bulge between two pinches. But in the case of range conservationists, the average age is less and the pinches are not as severe.

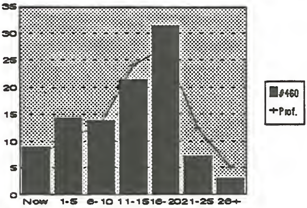
In the last 3 years, 59 range conservationists have been hired and 58 have left. 78% of the new hires have been at least 20 years from retirement, suggesting that most of the hiring is at entry level. 22% of these who leave are retirement eligible. However, 48% of those who left are more than 15 years from retirement, suggesting that many of the new hires leave in a few years.



GS-460, Forestry Series

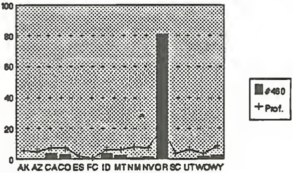
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



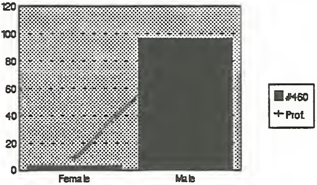
#460	8.9	14.4	13.8	21.3	31.4	7.2	2.9
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#460 By States



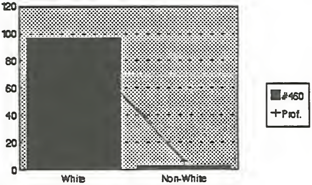
#460	0	0	3.5	3.2	0	0.3	4	2.3	0.6	12	80.	0.3	0	1.7	2.6
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21.	3.8	6.4	3.8	8.9

#460 By Sex



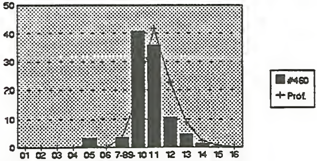
#460	3.5	96.5
Prof.	9.6	90.4

#460 By Race



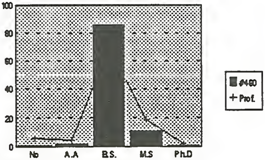
#460	97.1	2.9
Prof.	94.1	5.9

#460 By Grade



#460	0	0	0	0	3.2	0	3.5	40.8	38	10.4	4.8	1.2	0.3	0
Prof.	0	0	0	0	1	0	3.5	18	41.8	22.8	9	2.2	0.8	0

#460 By Degree



#460	0.6	1.7	85.8	11.3	0.6
Prof.	5.7	4.3	69	19	2

Forestry

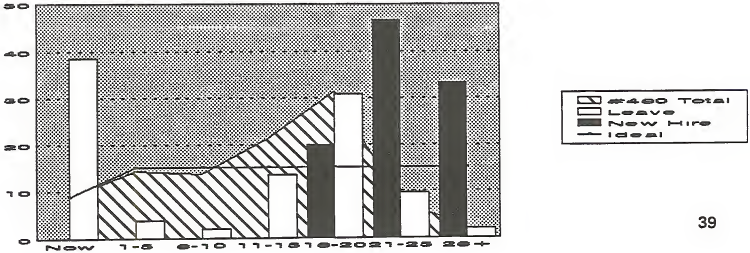
BLM had 347 foresters at the time the data was drawn. This is the third largest of professional occupations with more than 50 people, substantially smaller than range conservation but slightly larger than land surveyors.

The organizational distribution strongly favors "on the ground" work: 78% are in Resource Areas, 14% in District Offices, 5% in State Offices and less than 2% in the Washington Office, with only one individual each at the Fire Center and the Service Center. The distribution between States is entirely unique. 80% of the foresters are in Oregon, all of the other offices are well below average, and no foresters were shown in Alaska, Arizona, Eastern States or Utah. The heavy concentration of such a large occupation has the effect of making all the other professional occupations appear underrepresented in Oregon.

There are 12 female and 10 minority foresters, less than half the proportion of women and minorities for all professionals. 86% of the foresters have a Bachelors degree, a clear trend, while substantially fewer than the average for all professionals have either an advanced degree or no college degree. The grades for foresters are lower than average for all professionals: more than double the proportion are GS 9, while only about half the average proportion are GS 12 or higher. (See discussion of larger occupations on page 31). 21% are supervisors.

The distribution of retirement eligibility follows the same general pattern of all professionals -- a bulge between two pinches. But the distribution is uneven: compared to all professionals, there are slightly more foresters eligible for retirement now or in the next 5 years, there is a peak in 16-20 years, but fewer will be eligible in more than 20 years.

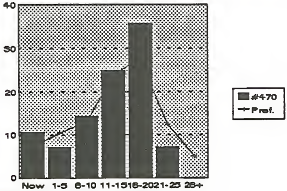
In the last 3 years, 15 foresters have been hired and 52 have left, plus nearly 9% are currently eligible for retirement, a pattern suggesting a decline. All of the new hires have been more than 15 years from retirement eligibility, and the lowest portion were hired at an age that is already in a bulge of retirement eligibility. Almost 39% of the foresters who left the organization were retirement eligible, but almost 35% were 10-20 years from retirement, suggesting that a substantial portion leave in mid-career, although some of these may go to other fields including program management.



GS-470, Soil Scientist

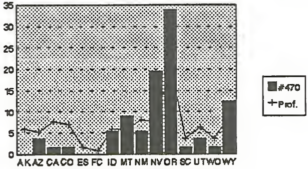
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



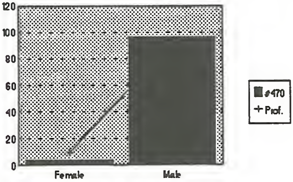
	Now	1-5	6-10	11-15	16-20	21-25	26+
#470	10.7	7.1	14.3	25	35.7	7.1	0
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#470 By States



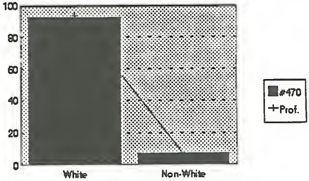
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#470	0	3.6	1.8	1.8	0	0	5.4	8.9	5.4	19.	33.	1.8	3.6	1.8	12.
Prof.	5.8	5.2	7.6	7.1	1.6	0.8	6	5.9	8.1	7.6	21.	3.8	6.4	3.8	8.9

#470 By Sex



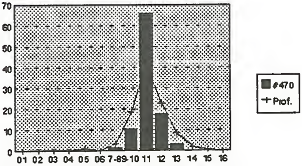
	Female	Male
#470	3.6	96.4
Prof.	9.6	90.4

#470 By Race



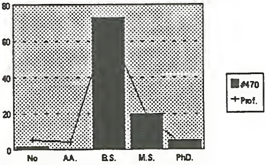
	White	Non-White
#470	92.7	7.3
Prof.	94.1	5.9

#470 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#470	0	0	0	0	0	0	1.8	10.7	66.	17.	3.6	0	0	0
Prof.	0	0	0	0	1	0	3.5	19	41.	22.	9	2.2	0.6	0

#470 By Degree



	No	A.A.	B.S.	M.S.	PhD.
#470	1.8	0	72.7	20	5.5
Prof.	5.7	4.3	69	19	2

Soil Scientist

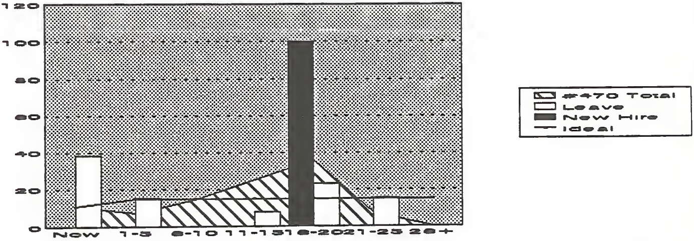
BLM had 56 soil scientists at the time the data was drawn. This is the smallest of the 12 professional occupations with more than 50 employees, slightly smaller than mining engineering.

The organizational distribution strongly favors "on the ground" work, although more are in District Offices than the larger occupations. 48% are in Resource Areas, 39% in District Offices, 9% in State Offices, and less than 2% at the Washington Office or Service Center. The distribution between States shows some similarity to the average. However, substantially more are in Oregon and Nevada, while substantially less are in Alaska, California, Colorado, and the Service Center.

There are 2 female and 4 minority soil scientists, lower than the average proportion for all professions. The occupation is slightly better educated than average, with a higher proportion of Bachelors, Masters, and PhD degrees. The grades show a clear central trend: 66% of the soil scientists are GS 11, half again more than average, while there are only half as many as average at the higher and lower grades. Less than 4% of the soil scientists are supervisors.

The distribution of retirement eligibility follows the same general trend of all professionals -- a bulge between two pinches -- but the soil scientists tend to be a bit older than average. Nearly 11% are currently eligible for retirement, and somewhat higher than average are eligible in the next 6-20 years. Thereafter the proportions drop dramatically. Only 7% are eligible in 20-30 years, none of them in the furthest 5 years, suggesting that trainees are not being added.

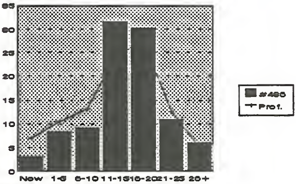
In the last 3 years, 5 soil scientists have been hired and 13 have left. All of the new hires have been of an age that places them in the peak of the bulge. Almost 40% of those who left were eligible for retirement, the remainder are distributed fairly evenly by retirement eligibility.



GS-486, Wildlife Biologist

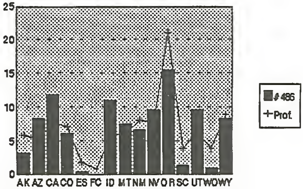
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



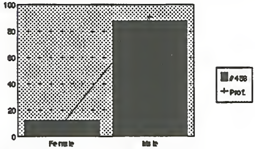
	Now	1-5	6-10	11-15	16-20	21-25	25+
#486	3.1	8.8	9.2	31.6	30.3	11	6.1
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#486 By States



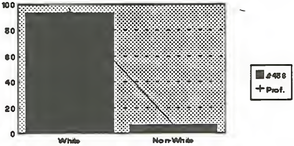
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#486	3.1	8.3	11.	6.1	0.4	0	11	7.5	6.6	9.6	15.4	1.3	9.6	0.9	8.3
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21.	3.8	6.4	3.8	8.9

#486 By Sex



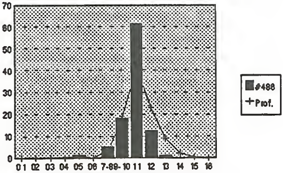
	Female	Male
#486	12.3	87.7
Prof.	8.6	80.4

#486 By Race



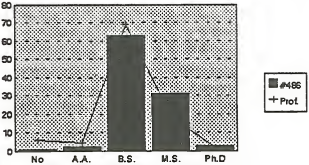
	White	Non-White
#486	93.4	6.6
Prof.	94.1	5.9

#486 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#486	0	0	0	0	1.3	0	5.3	18	61.4	12.3	1.3	0	0.4	0
Prof.	0	0	0	0	1	0	3.5	19	41.2	22.5	8	2.2	0.8	0

#486 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#486	0.9	2.2	62.7	31.1	3.1
Prof.	5.7	4.3	69	19	2

Wildlife Biologist

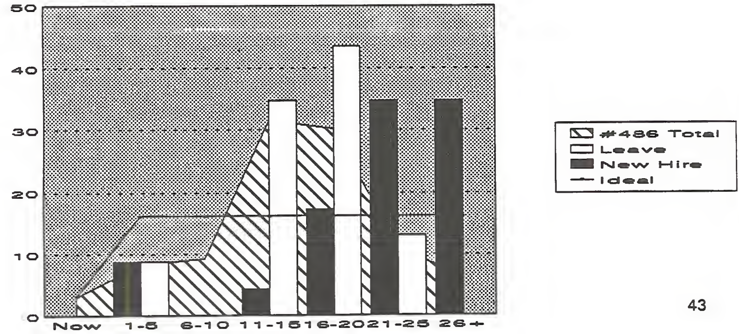
BLM had 228 wildlife biologists at the time the data was drawn. This is the 8th largest of the 12 professional occupations with more than 50 staff, substantially smaller than geologists and substantially larger than archaeologists.

The organizational distribution strongly favors "on the ground" work: 66% are in Resource Areas, 24% are in District Offices, 5% are at State Offices, and less than 1% are at the Washington Office. The distribution between States generally follows the average for all professionals, although there are fewer in Oregon than average.

There are 28 female and 15 minority wildlife biologists, slightly above the average proportion for all professionals. Half again more have a Masters degree than average for professionals, while fewer have no college degree. The grades show a clear central trend: 61% are GS 11, while substantially fewer than average are at higher grades. Less than 2% of the wildlife biologists are supervisors.

The distribution of years to retirement eligibility shows the same general trend as all professionals -- a bulge between two pinches -- but the bulge is more pronounced for wildlife biologists. Only 3% are currently eligible for retirement, and fewer than average are eligible in the next 10 years, while more than average are eligible in 10-20 years.

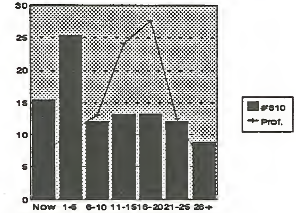
In the last 3 years, 23 wildlife biologists have been hired and 23 have left. Nearly all the new hires have been at least 15 years from retirement eligibility, and the majority of these are at the beginning of their career and not in the central bulge. There has been no recent retirement. 78% of those leaving have been from 11-20 years from retirement, the age of the bulge. This suggests that the bulge is being somewhat attenuated by turnover.



GS-810, Civil Engineer

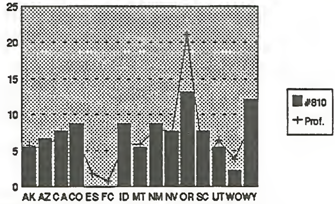
All Figures in Percent, Comparison To All Professionals

Years To Retire Eligible



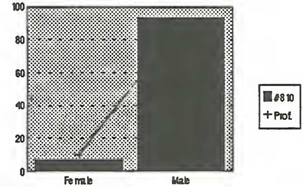
#810	15.4	25.3	12.1	13.2	13.2	12.1	8.8
Prof.	7.1	10.5	13.1	24.1	27.9	12.5	5

#810 By States



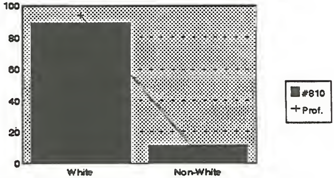
#810	5.5	6.6	7.7	8.8	0	0	8.8	5.5	8.8	7.7	13.2	7.7	5.5	2.2	12.1
Prof.	5.8	5.2	7.6	7.1	1.2	0.8	6	5.8	8.1	7.8	21.1	3.8	6.4	3.8	8.8

#810 By Sex



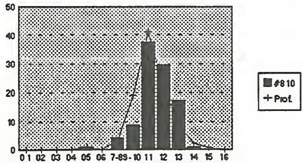
#810	6.6	93.4
Prof.	9.6	90.4

#810 By Race



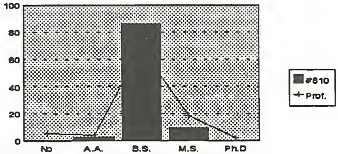
#810	88.9	11.1
Prof.	94.1	5.9

#810 By Grade



#810	0	0	0	0	1.1	0	4.4	8.8	37.4	28.7	17.6	1.1	0	0
Prof.	0	0	0	0	1	0	3.5	19	41.2	22.	8	2.2	0.8	0

#810 By Degree



#810	0	3.3	85.7	10	0
Prof.	5.7	4.3	69	19	2

Civil Engineer

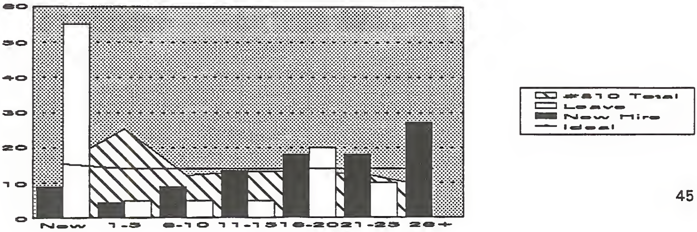
BLM had 91 civil engineers at the time the data was drawn. This is the 9th largest of the 12 professional occupations with more than 50 staff, slightly smaller than petroleum engineers and significantly larger than mining engineers.

The organizational distribution is roughly equal between District and State Offices: with no civil engineers at the Resource Areas, 45% at District Offices, 40% at State Offices (by far the greatest proportion of any professional occupation at the SO), 8% at the Service Center and 2% at the Washington Office. The distribution by States is roughly equal to the average for all professionals, although there are somewhat more than the average number of professionals in Idaho and Wyoming, substantially less than average in Oregon, and none in Eastern States or the Fire Center.

Of 91 civil engineers, 6 are female and 10 minority, fewer women but substantially more minorities than the average proportion for all professions. About 87% of the civil engineers have a bachelors degree, a clear central trend, while substantially fewer than average have either higher degrees or no college degree. The grade levels follow the general distribution of the professionals, but are skewed toward the higher grades, with almost half again more GS 12, 13s and 14s than average for professionals. 31% of the civil engineers are supervisors, among the highest proportions of the professionals.

More than 40% of the civil engineers are currently eligible for retirement or will become so in the next five years, a significantly greater proportion than the other professions. As a result this occupation would appear to be a high priority for workforce planning. From 6-30 years out the projected rate of retirement eligibility is flat at about 12% per five years.

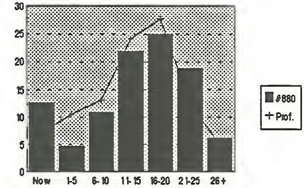
In the last 3 years, 22 civil engineers have been hired and 20 have left, 55% of those leaving have been retirement eligible, the highest rate among the professional occupations. 64% of the new hires have been at least 15 years from retirement, with a small but clear trend toward younger employees. By contrast, two of the new hires are already retirement eligible.



GS-880, Mining Engineer

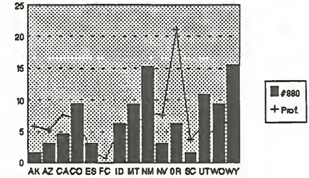
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



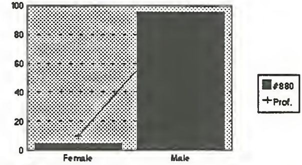
	Now	1-5	6-10	11-15	16-20	21-25	26+
#880	12.5	4.7	10.9	21.9	25	18.8	6.3
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#880 By States



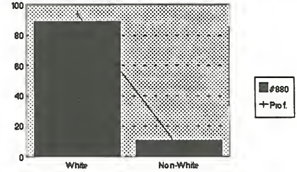
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#880	1.6	3.1	4.7	9.4	3.1	0	6.3	9.4	15.	3.1	6.3	1.6	10.9	9.4	15.
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	3.1	7.6	21.	3.8	6.4	3.8	3.9

#880 By Sex



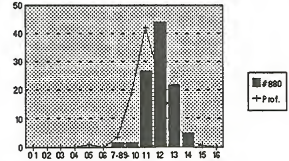
	Female	Male
#880	4.7	95.3
Prof.	9.6	90.4

#880 By Race



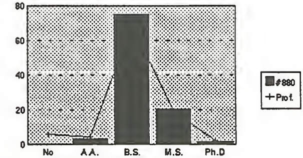
	White	Non-White
#880	89.1	10.9
Prof.	94.1	5.9

#880 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#880	0	0	0	0	0	0	1.6	1.6	26.	43.	21.	4.7	0	0
Prof.	0	0	0	0	1	0	3.5	19	41.	22.8	9	2.2	0.6	0

#880 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#880	0	3.1	75	20.3	1.6
Prof.	5.7	4.3	69	19	2

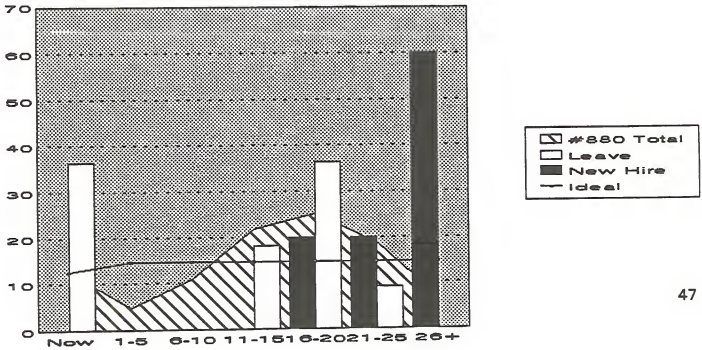
Mining Engineer

BLM had 64 mining engineers at the time the data was drawn. This is the 11th largest of the 12 professional occupations with 50 or more employees, slightly larger than soil scientists and slightly smaller than physical scientists.

The organizational distribution is fairly flat, slightly skewed toward the State Offices, with approximately 19% in Resource Areas, 31% in Districts, 38% in State Offices, 9% in the Washington Office and 2% in the Service Center. The distribution between States is significantly different than the average for professional occupations, with notably more mining engineers in New Mexico, Wyoming, and the Washington Office, while significantly fewer in Alaska, Arizona, Nevada, Oregon and the Service Center.

Of the 64 mining engineers, 3 are female and 7 minority, about double the average proportion of minority but half the proportion of females of the professional occupations average. Slightly higher proportions than the average for all professions have bachelors or masters degrees. The grades are significantly higher than average for the professions. Hardly any are below GS 11 and there are a third less GS 11s than average, but there are nearly twice as many GS 12s, 13s, and 14s as average for the professions. 16% are supervisors, well below the median for professionals.

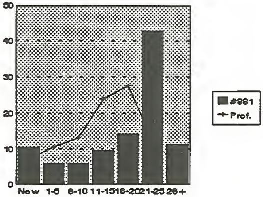
In the last 3 years, 5 mining engineers have been added (8% of the total) and 11 have left, bringing a significant improvement in education. Of those leaving, 36% have been retirement eligible but 55% were at mid-career. 60% of the new hires have been at least 26 years from retirement eligibility, suggesting a strong effort to bring in trainees, and the remainder have been more than 15 years from retirement.



GS-881, Petroleum Engineer

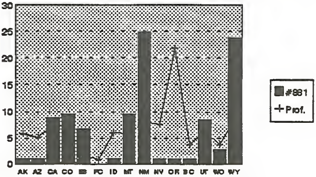
All Figures In Percent, Comparison To All Employees

Years To Retire Eligible



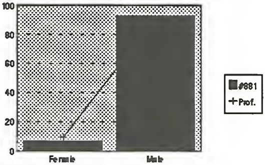
	Now	1-5	6-10	11-15	16-20	21-25	26+
#881	10.5	5.7	5.7	9.5	14.3	42.9	11.4
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#881 By States



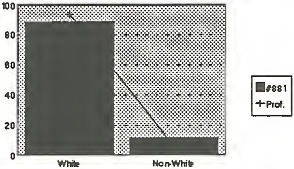
	AK	AZ	CA	CO	EB	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#881	1	1	8.8	9.5	6.7	0	1	9.5	24.	1	1	1	8.6	2.9	23.
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21.	3.8	6.4	3.8	3.9

#881 By Sex



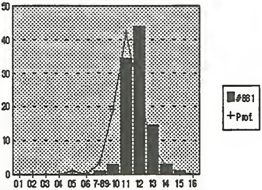
	Female	Male
#881	6.7	93.3
Prof.	9.6	90.4

#881 By Race



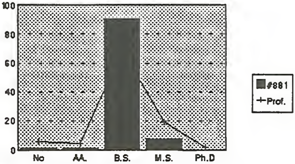
	White	Non-White
#881	88.6	11.4
Prof.	94.1	5.9

#881 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#881	0	0	0	0	0	0	1	2.9	34.	43.	14.	2.9	1	0
Prof.	0	0	0	0	1	0	3.5	19	41.	22.	9	2.2	0.6	0

#881 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#881	1	1	90.5	7.6	0
Prof.	5.7	4.3	69	19	2

Petroleum Engineer

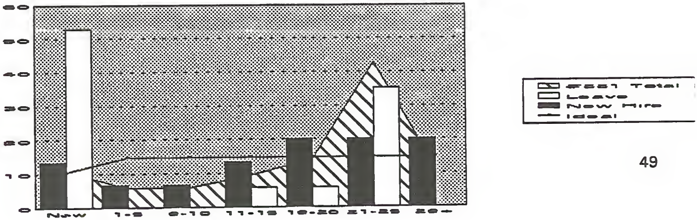
BLM had 105 Petroleum Engineers at the time the data was drawn. This is the 8th largest of the professional occupations, slightly larger than civil engineers but significantly smaller than archaeologists.

The organizational distribution shows the greatest concentration in District Offices of any of the professionals: 23% of the petroleum engineers are in Resource Areas, 48% in District Offices, 25% in State Offices, 3% in the Washington Office, and 1% at the Service Center. The distribution by State is dramatically different from the average for professional occupations: there are about three times more petroleum engineers than average for the professions in New Mexico, Wyoming, and Eastern States, while significantly fewer in Alaska, Arizona, Idaho, Nevada, Oregon, and the Service Center.

Of 105 petroleum engineers, 7 are female and 12 minority, more minority but less female than the proportional average for the professional occupations. More than 90% of the petroleum engineers have a bachelors degree, a clear central trend, while fewer than average for the professional occupations have an advanced degree or no college. The petroleum engineers tend to hold higher grades than average for all professionals, with dramatically fewer GS 9s, significantly fewer GS 11s, but almost double the number of GS 12s, and half again more than average GS 13s. 21% are supervisors.

While somewhat more petroleum engineers than average for the professional occupations are currently eligible for retirement, the remainder of the population is significantly younger than average. There is a larger pinch in the retirement eligibility than average for then next 10 years; unlike most other professional occupations, the pinch continues for the decade of 10-20 years out; the bulge occurs at 21-25 years from retirement eligibility. This pattern suggests that a substantial number of entry level people were hired just a few years ago.

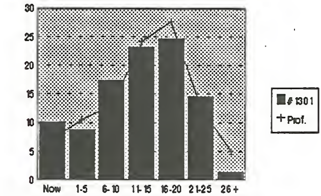
In the last 3 years, 15 petroleum engineers have been hired (14% of the total) and 17 have left. The new hires have been fairly evenly distributed by years to retirement eligibility, including 13% past retirement eligibility. 53% of those leaving have been at retirement eligibility, but 35% have been 21-25 years from retirement eligibility, perhaps a demonstration of the high turnover in the early years of any career and perhaps in response to the bulge in this occupation at that age group.



GS-1301, Physical Scientist

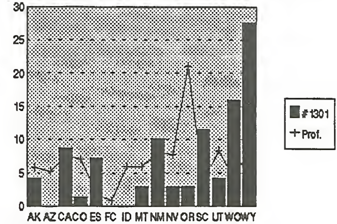
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



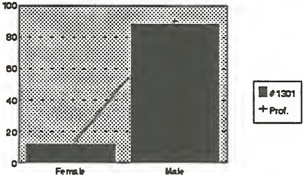
#1301	10.1	8.7	17.4	23.2	24.6	14.5	1.4
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

#1301 By States



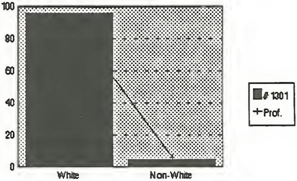
#1301	4.3	0	8.7	1.4	7.2	0	0	2.9	10.1	2.9	2.9	11.6	4.3	15.9	27.5
Prof.	5.3	5.2	7.9	7.1	1.8	0.3	6	5.9	8.1	7.3	21.1	3.8	8.4	3.3	8.9

#1301 By Sex



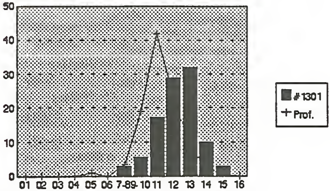
#1301	11.6	88.4
Prof.	9.6	90.4

#1301 By Race



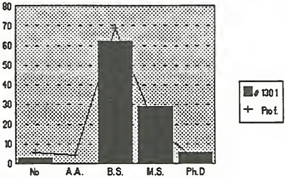
#1301	95.7	4.3
Prof.	94.1	5.9

#1301 By Grade



#1301	0	0	0	0	0	0	2.9	5.8	17.4	29	31.9	10.1	2.9	0
Prof.	0	0	0	0	1	0	3.5	18	41.8	22.8	9	2.2	0.6	0

#1301 By Degree



#1301	2.9	0	62.3	29	5.8
Prof.	5.7	4.3	69	19	2

Physical Scientist

BLM had 69 physical scientists at the time the data was drawn. This is the 10th largest of the 12 professional occupations with more than 50 employees, slightly larger than mining engineering and somewhat smaller than civil engineering.

The organizational distribution is the flattest of the professional occupations, with 20% in Resource Areas, 20% in District Offices, 28% in State offices, 16% at the Washington Office, and 12% at the Service Center (by far the largest professional proportions in the WO and SC). However since there are fewer of the higher level offices, this flat distribution means the scientists are more centralized than most professions. The distribution by State differs markedly from the professional average. 28% are in Wyoming, more than 3 times the professional average, while significantly smaller proportions are in Arizona, Colorado, Idaho, Nevada, and Oregon.

Of the 69 physical scientists, 8 are female and 3 are minority, somewhat more women and slightly fewer minorities than the average proportion for the professional occupations. Physical scientists tend to be better educated than average for the professions, with half again more masters degrees and almost 3 times more PhDs. The grades are significantly higher than average for the professional occupations, with well less than half the usual proportion of GS 9s and 11s, but more than 3 times as many GS 13s, 14s, and 15s. 33% are supervisors, the highest proportion of any of the professional occupations.

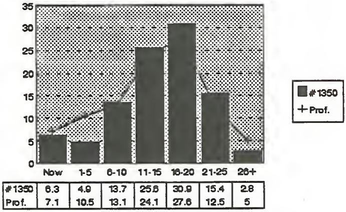
The distribution by retirement eligibility is close to the average for all the professional occupations (a bulge between two pinches, although the single new hire in the chart below brings about a different scale and thus an apparently milder bulge). There is a somewhat larger than average proportion of retirement eligibility at 6-10 years and again at 21-25 years, followed by significantly fewer than average at 26+ years. The result is that almost half of this occupation is in the middle decade while only 16% is in the youngest decade.

In the last 3 years, 1 physical scientist was hired (the lowest number and the lowest proportion of any of the 12 professional occupations) and 11 left. Those leaving have been fairly evenly distributed across the years although none was at retirement eligibility. Demographic analysis of the single hire will not be provided for privacy reasons.

GS-1350, Geologist

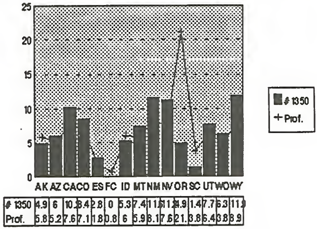
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



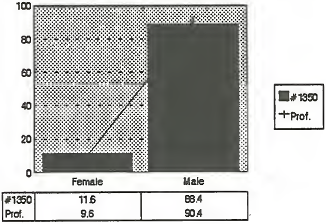
	Now	1-5	6-10	11-15	16-20	21-25	26+
#1350	6.3	4.9	13.7	25.6	30.9	15.4	2.8
Prof.	7.1	10.5	13.1	24.1	27.6	12.5	5

1350 By States



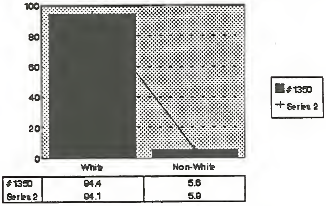
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
# 1350	4.9	6	10.	8.4	2.8	0	5.3	7.4	11.	11.	4.9	1.4	7.7	6.3	11.
Prof.	5.8	5.2	7.6	7.1	1.8	0.8	6	5.9	8.1	7.6	21.	3.8	6.4	3.8	3.9

1350 By Sex



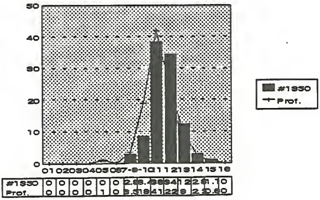
	Female	Male
#1350	11.6	88.4
Prof.	9.6	90.4

#1350 By Race



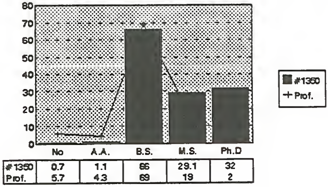
	White	Non-White
#1350	94.4	5.6
Series 2	94.1	5.9

1350 By Grade



#1350	0	0	0	0	0	0	2.8	8.4	38	34	12	2.2	1.1	0
Prof.	0	0	0	0	1	0	3.5	18	41	22	9	2.2	0.6	0

#1350 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#1350	0.7	1.1	66	29.1	32
Prof.	5.7	4.3	69	19	2

Geologist

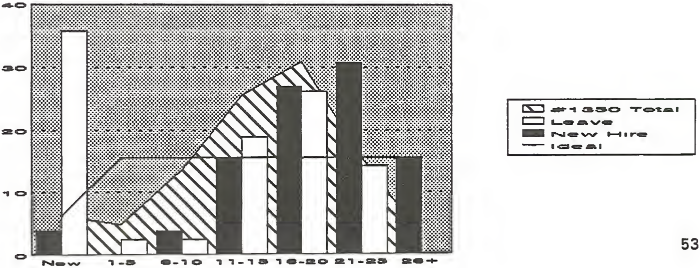
BLM had 285 geologists at the time the data was drawn. This total is the 5th largest of the 12 professional occupations with more than 50 employees, somewhat smaller than land surveyors and significantly larger than wildlife biologists.

The organizational distribution is fairly even with a small trend towards the field, with 31% in Resource Areas, 37% in District Offices, 20% at State Offices, 6% in the Washington Office and 1% at the Service center. The distribution between the States is fairly close to average with the exceptions that there are significantly more geologists in Eastern States and significantly fewer in Oregon than average for the professional occupations.

Of the 285 geologists, 33 are female and 16 are minority, somewhat more females than the average proportion for all professional occupations. The geologists are somewhat better educated than average for the professions, with half again more masters degrees than the average proportion. The grade level is also somewhat higher than average: there are fewer than half as many GS 9 geologists as average for the professional occupations, but half again more GS 12s. 14% are supervisors.

The distribution by years to retirement eligibility is about average for the professions -- a bulge between two pinches -- with slightly fewer than average reaching retirement eligibility in 1-5 years and in 26+ years, and slightly more than average in the other increments.

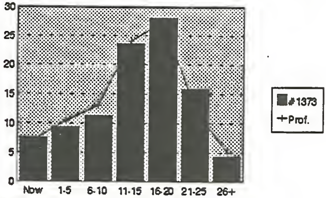
In the last 3 years, 26 new geologists have been hired (9% of the total) and 42 have left. About 75% of the new hires are at least 15 years from retirement eligibility, although 27% are in the center of the bulge. 36% of those leaving were at retirement eligibility, and another 40% were in the center of the bulge.



GS-1373, Land Surveyor

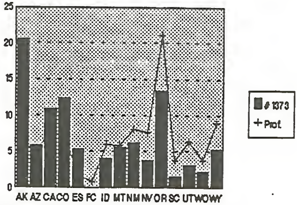
All Figures In Percent, Comparison To All Professionals

Years To Retire Eligible



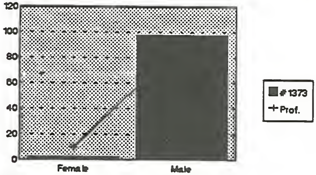
	Now	1-5	6-10	11-15	16-20	21-25	26+
#1373	7.5	9.3	11.2	23.6	28	15.8	4.3
Prof.	7.1	10.5	13.1	24.1	27.8	12.5	5

#1373 By States



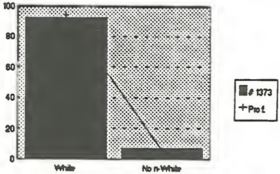
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#1373	20.5	5.8	10.8	12.4	5.5	0	4	5.8	6.2	3.7	13.4	1.8	3.1	2.2	5.5
Prof.	5.3	5.2	7.8	7.1	1.3	0.3	0	5.8	8.1	7.8	21.1	3.3	6.4	3.3	8.8

#1373 By Sex



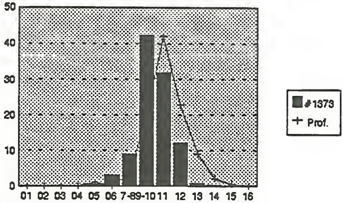
	Female	Male
#1373	2.2	97.8
Prof.	9.6	90.4

#1373 By Race



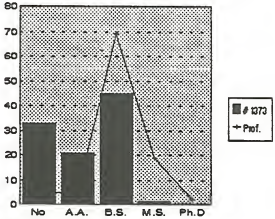
	White	Non-White
# 1373	92.5	7.5
Prof.	94.1	5.9

#1373 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#1373	0	0	0	0	0.8	3.1	9	42.2	31.7	12.1	0.8	0.3	0	0
Prof.	0	0	0	0	1	0	3.5	18	41.8	22.8	8	2.2	0.8	0

#1373 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#1373	33	20.9	44.9	1.2	0
Prof.	5.7	4.3	69	19	2

Land Surveyor

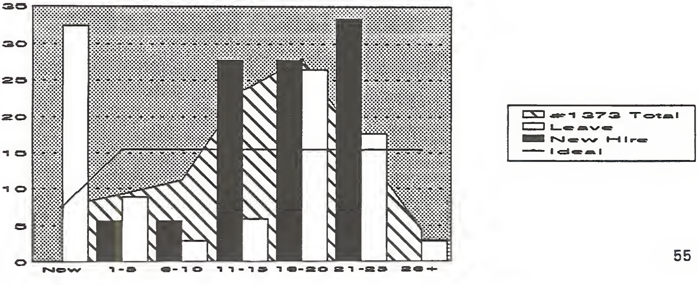
BLM had 322 land surveyors at the time the data was drawn. This is the 4th largest of the 12 professional occupations with more than 50 members, larger than geologists but smaller than foresters.

The organizational distribution strongly favors State Offices, with 0% in Resource Areas (civil engineering is the only other professional occupation where this is the case), 5% at District Offices, 71% at State Offices with an additional 21% in Alaska, 2% in the Washington Office, and 1% at the Service Center. The distribution by States follows the general trend, but there are 4 times more land surveyors than the average for all professionals in Alaska, and also more in Colorado and Eastern States, but fewer in Oregon.

Of the 322 surveyors, 7 are women and 24 are minority, substantially fewer women but slightly more minorities than average for all professions. The education of surveyors is substantially different than average for the professions, with more than half of the surveyors not holding a college degree, and fewer than average holding advanced degrees. The grade distribution follows the same pattern as for all professions but is skewed toward lower grades, with twice the average number of GS 7s and 9s, but less than half the number of GS 12s and 13s. 27% are supervisors.

The distribution by retirement eligibility follows the general trend, a bulge between two pinches, but the surveyors tend to be slightly younger than average.

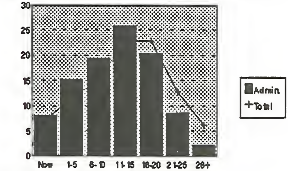
In the last 3 years, 18 surveyors have been hired and 34 have left, bringing a significant improvement in education. A third of those separating have been at retirement eligibility, most of the remainder are more than 15 years from retirement. Most of the new hires are 11-25 years from retirement, which is the age that already has the bulge of employees.



PATCO ADMINISTRATIVES

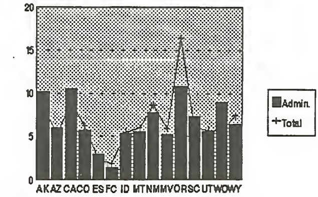
All Figures In Percent, Comparison To All Employees

Years To Retire Eligible



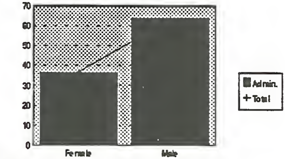
	Now	1-5	6-10	11-15	16-20	21-25	26+
Admin.	8.1	15.2	19.4	25.9	20.4	8.8	2.3
Total	7.3	11.4	15	22.8	22.8	12.8	6.2

By States



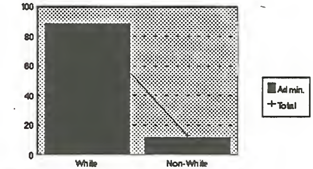
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	MV	OR	SC	UT	WO	WY
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4
Total	8.4	5.2	9	6.2	2.4	1.8	5.5	6	8.6	5.9	16.	6	5.7	5.7	7.4

By Sex



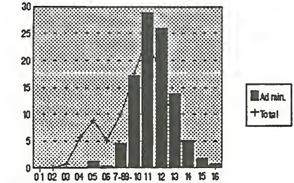
	Female	Male
Admin.	36.3	63.7
Total	36.7	63.3

By Race



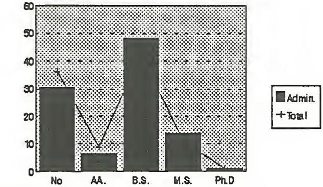
	White	Non-White
Admin.	88.7	11.3
Total	87	13

By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
Admin.	0	0	0	0	1.3	0.4	4.7	17.2	29	26	13.	5.1	1.8	0.8
Total	0	0.1	0.8	5.6	8.8	5.2	10.	17.	24.	16.2	7.5	2.4	0.8	0.3

By Degree



	No	AA.	B.S.	M.S.	Ph.D
Admin.	30.6	6.4	48.2	13.9	1
Total	36.2	8.8	42.9	11.1	1

VIII. ADMINISTRATIVE OCCUPATIONS

Overview

BLM had 2996 individuals in the PATCO category of administrative occupations at the time the data was drawn. It is the largest of all PATCO categories, in round numbers, 100 more than professionals, 1200 larger than technical and more than 1700 larger than clerical. A total of 12 administrative occupations have more than 50 members, the threshold for detailed occupational analysis in this report. Personnel management, administrative officer, and management analyst also have at least 50 members but were inadvertently left off the list for detailed analysis. The smaller administrative occupations such as safety, park ranger, manpower development, personnel management, labor relations, support services administration, logistics management, and numerous others have not been described in detail here, but are included in the summary data about administrative staff.

The distribution of administrative employees by organizational level is roughly 600 at the Resource Areas, 700 at District Offices and 900 at the State Offices. The distribution among the State Offices closely resembles the pattern for all BLM staff, with the exception that the percentage in Oregon is somewhat less than for all BLM staff, although Oregon has more Resource Areas and therefore a higher proportional average of all professional workers. The Washington Office has proportionally twice as many administrative staff as the average for all BLM.

Of the 2996 administrative employees, 1088 are female and 339 are minorities, about the same proportions as in other PATCO categories. The education of administrative staff is slightly higher than that for the combined PATCO categories, but somewhat lower than professionals largely because the educational level for computer specialists and land law examiners is markedly lower than for all other administrative workers. The grades of administrative employees are substantially higher than most PATCO categories, almost as high as the professionals. While this is partly due to the presence of Series 340 Program Managers, other occupations within the group also tend to higher grades. Only about 6% of all administrative workers are below the GS 9 level, 68% are at the GS 11-13 level. There are more administrative SES workers than all other PATCO categories. Thirty two percent of administrative staff are supervisors, the highest for all PATCO categories.

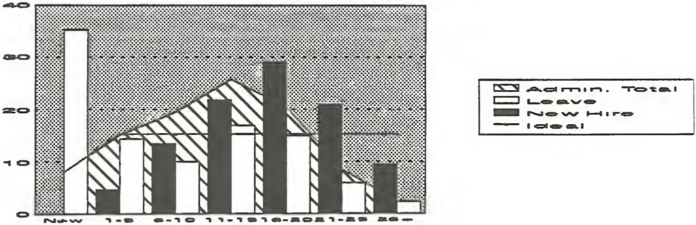
The distribution of administrative staff by retirement eligibility is approximately the same as other PATCO categories -- a bulge between two pinches -- but with the variation that the bulge is skewed to earlier retirement eligibility. Over the next ten years, this group will create the biggest exodus of all PATCO categories. This makes it an obvious target for workforce planning. Proportionally about twice as many program managers as all other administrative staff are eligible to retire, with over 50% more projected to the eligible in the next ten years.

In the last three years, 302 new administrative workers have been hired and 439 have left. Hiring is not keeping pace with separations particularly in the program manager and miscellaneous administrative and program staff job series, which will deepen the pinch following the bulge created by the large number of impending retirements. Thirty five percent of those leaving the organization were eligible for retirement, with another 40% among those 11-20 years from eligibility, suggesting some mid-career turnover. More than 70% of all new hires are more than 11 years from eligibility.

Of the 302 new administrative workers in the last 3 years, there has been little statistically significant change in demographics. Inspection and compliance specialists, contracting officers, and purchasing agents have increased the proportion of men, and contracting specialists have improved education. At a lower significance level, computer specialists have increased the number of whites. It may be appropriate to review the emphasis given to EEO issues in recruitment and selection.

The administrative staff are on average the oldest of the four PATCO categories. Of particular note is the fact that 15% of the program managers are currently eligible for retirement and another 25% will become so over the next 5 years. In the 301 series of general administration, 11% are currently eligible and another 19% will become so over the next 5 years. These relatively high numbers suggest that the candidate pools of replacements should be reviewed to ensure that a constant supply at the necessary high level will be available.

At the other end of retirement eligibility, many of the occupations have notably low numbers of workers at more than 20 years from retirement eligibility, including environmental protection specialists (7%), 301 administration (7%), program analyst (4%), contracting (8%), and realty specialists (9%). A flat distribution would show around 33% in this age group. The suggestion is that additional recruitment efforts may be needed to ensure an even flow of well trained mid-level people.



Details on Program Managers

Because the Program Managers are the senior managers in BLM and one of the groups with the highest projected turnover in the next few years, additional analysis is provided here beyond that in the normal occupational analysis.

67% of the program managers are eligible to leave in the next 10 years. It appears that the higher the organizational level, the fewer program managers there are but the older they are. There are 30 at the State Offices, but 47% of those are eligible to retire now, with another 23% in the next five years. 78% of those at the Alaska Office, and a 66% of the managers at the Service Center are also eligible to retire now. The managers at the District Office are more evenly divided among the retirement groups, indicating a younger population; and, those at the Resource Areas are younger still. The Washington Office has fewer proportionally who are eligible now, but over the next 10 years 77% will reach retirement eligibility.

Female program managers are markedly younger than male managers, with no female managers eligible to retire now or in the next five years and only three eligible in 6-10 years. By contrast, 70% of the males will be eligible in the next 10 years. Of female managers, over half are at the Resource Areas and slightly less than a third are at the District Offices.

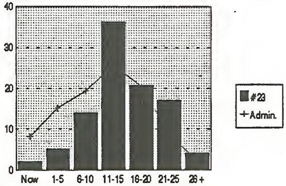
There are about the same percentages of minority and white managers eligible to retire now, but eligibility of white managers is then fairly evenly distributed over 6-15 years while minority managers tend to be younger, with more than half eligible in 11-15 years. There are only 7 minority program managers out of 280, and only 4 are women. The grades of the minority managers are lower, with nearly half at the GS 12 level, while 68% of white managers are above that level.

Those managers in GS 12 and 13 are eligible to retire now at about the same rate as all other PATCO categories, with the concentration in the younger age groups. However, over the next 10 year 60% of all those at GS 14, 15 and SES are eligible to retire. There is also a decline over time in the educational level of managers, with 100% of those with PhDs, 60% of those with Masters, and 70% of those with bachelors degrees eligible to retire in the next ten years. Those with degrees in agriculture related topics make up the largest academic discipline among the managers, with 74% of those projected to retire over the next 10 years.

GS-23, Outdoor Recreation Planner

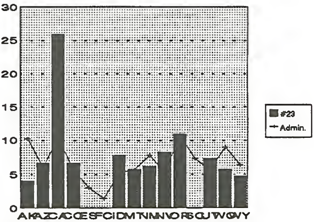
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



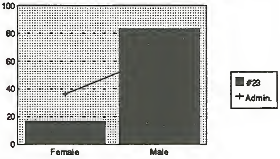
	Now	1-5	6-10	11-15	16-20	21-25	26+
#23	2.1	5.2	14	36.3	20.7	17.1	4.1
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#23 By States



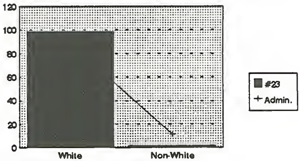
#23	4.	6.	25	6.	0	0	7.	5.	6.	8.	10	0	7.	5.	4.
Admin.	10	6	10	5.	3	1.	5.	5.	7.	5.	10	7.	5.	9	6.

#23 By Sex



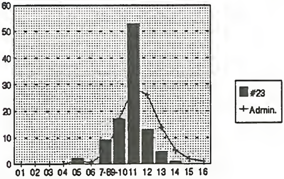
	Female	Male
#23	16.6	83.4
Admin.	36.3	63.7

#23 By Race



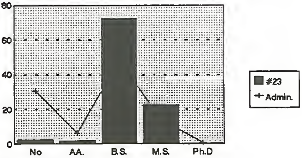
	White	Non-White
#23	98.4	1.6
Admin.	88.7	11.3

#23 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#23	0	0	0	0	2.1	0	9.3	17.	52.	13	4.7	1	0	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.	29	26	13.	5.1	1.8	0.8

#23 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#23	2.6	2.1	72.4	22.4	0.5
Admin.	30.6	6.4	48.2	13.9	1

Outdoor Recreation Planners

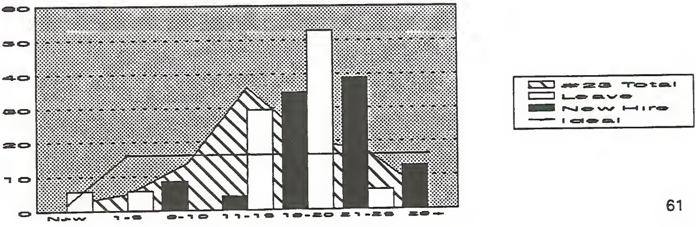
BLM had 193 outdoor recreation planners at the time the data was drawn. This is the sixth largest of the major administrative occupations, about half the size of the largest group, miscellaneous administrative workers.

Outdoor recreation planners are organizationally placed primarily in the Resource Areas, which have nearly two thirds of the planners; nearly 20% of the planners are located at District Offices, 9% at the State Offices, 6% at the Washington Office, and none at the Service Center. The distribution by State is roughly equal to the average for all Administrative groups, except there are substantially more planners in California and in Idaho, but none in the Eastern States or Fire Center.

There are 32 women and 3 minorities out of 193 planners, substantially fewer women and minorities than the average proportion for all administrative personnel. Planners overall have a much higher education level than the average administrative personnel. Nearly three-fourths of the planners have a bachelors degree, a clear trend, with almost a quarter holding higher degrees. More than half the planners are GS 11, almost double the average, while substantially fewer than average are at higher grades. Only 7% are supervisors.

The outdoor recreation planners follow the general pattern of all administrative workers with regard to retirement eligibility -- a bulge between two pinches -- but the bulge is restricted to the 11-15 years increment with substantially fewer than average closer to retirement than that. In other words, this occupation is somewhat younger than average for the administrative category.

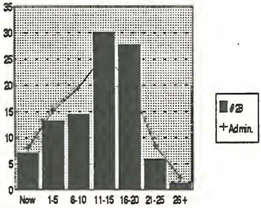
In the last three years, 23 planners have been hired and 17 have left. Less than 6% were eligible for retirement at separation, one of the lowest for all administrative personnel, which means that most of the turnover occurs early in the career. About 73% of all new hires are at least 16-25 years away from retirement eligibility, with only 13% of the new hires eligible in 26+ years.



GS-28, Environmental Prot. Spec.

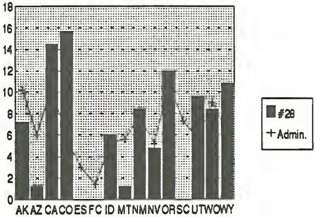
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



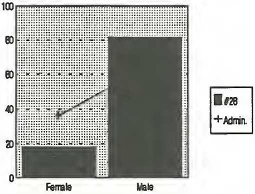
	Now	1-5	6-10	11-15	16-20	21-25	26+
#28	7.2	13.3	14.5	30.1	27.7	6	1.2
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#28 By States



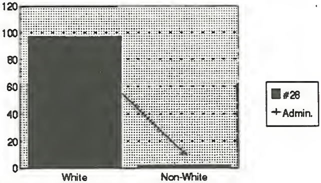
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#28	7.2	1.2	14.	15.	0	0	6	1.2	8.4	4.8	12	0	9.6	8.4	10.
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4

#28 By Sex



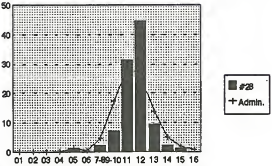
	Female	Male
#28	18.1	81.9
Admin.	36.3	63.7

#28 By Race



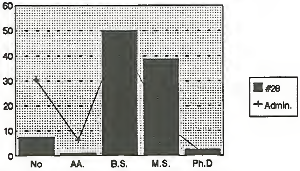
	White	Non-White
#28	97.6	2.4
Admin.	88.7	11.3

#28 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#28	0	0	0	0	1.2	0	2.4	7.2	31.	44.	9.6	2.4	1.2	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.	29	26	13.	5.1	1.8	0.8

#28 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#28	7.5	1.2	50	38.7	2.5
Admin.	30.6	6.4	48.2	13.9	1

Environmental Protection Specialist GS-28

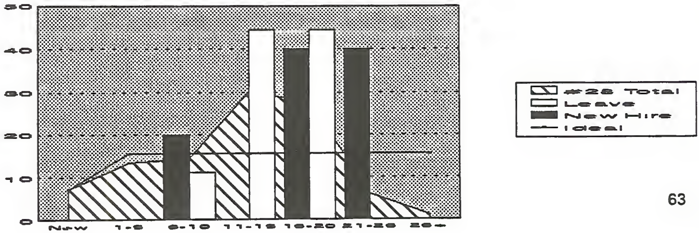
BLM had 83 environmental protection specialists at the time the data was drawn. This is the tenth largest of the 12 major administrative occupational groupings with more than 50 employees, slightly more than program analysts and slightly smaller than public affairs.

The organizational distribution is heavily concentrated at the District Offices with 40%, while 28% are at the Resource Areas and 17% at the State offices. There are 8% at the Washington Offices. The distribution by State is unusual: Colorado has three times the average for administrative staff, California and Wyoming have almost half again the average, Arizona and Montana have substantially below average, and Eastern States, the Fire Center and the Service Center have none.

There are only 15 woman and 2 minorities out of 83 environmental protection specialists, markedly fewer woman and minorities than the proportional average in the total administrative population. Fully half of all these specialists have a bachelors degree, slightly higher than for all administrative personnel; however, nearly 39% have a masters degree as well, which is nearly three times as many as the total administrative population. Far fewer than average have no college degree. The grade levels show a strong central trend of GS 11-12, with almost double the average number of 12s, but substantially fewer either higher or lower. Eleven percent of these specialists are supervisors.

The distribution of retirement eligibility follows the same general pattern as all administrative staff -- a bulge between two pinches -- but the bulge is higher and the pinches lower than average for the administrative category.

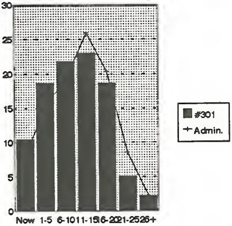
In the last three years, five environmental protection specialist have been hired and nine have left. Of the nine who separated, none was eligible for retirement. Almost all the separations and hiring is at mid-career.



GS-301, Misc. Admin. and Program

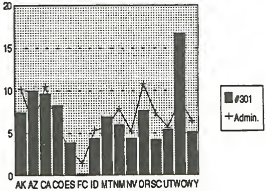
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



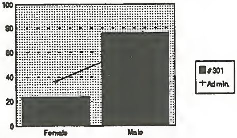
	Now	1-5	6-10	11-15	16-20	21-25	26+
#301	10.5	18.6	21.8	23	18.6	5.1	2.2
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#301 By States



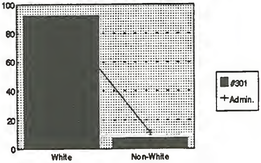
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#301	7.4	10	9.6	8.3	3.9	0.2	4.4	6.9	5.9	4.4	7.6	4.2	5.4	16.	5.1
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4

#301 By Sex



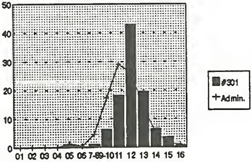
	Female	Male
#301	23.8	76.2
Admin.	36.3	63.7

#301 By Race



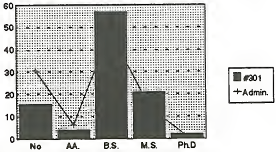
	White	Non-White
#301	92.1	7.9
Admin.	88.7	11.3

#301 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#301	0	0	0	0	1	0.2	1	6.3	18.	42.	19.	6.6	3.7	0.7
Admin.	0	0	0	0	1.3	0.4	4.7	17.	29	26	13.	5.1	1.8	0.8

#301 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#301	15.6	4.2	57.1	20.8	2.2
Admin.	30.6	6.4	48.2	13.9	1

Miscellaneous Administrative and Program GS-301

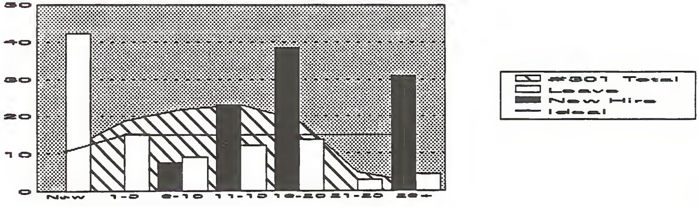
BLM had 408 miscellaneous administrative and program staff, the largest group of the 12 administrative occupations with more than 50 employees. This group includes all those administrative employees whose position classification reflects duties for which no other job series is appropriate.

Organizationally the miscellaneous administrative staff is fairly evenly distributed, 22% at the State Offices, 19% at the Resource Areas, and 17% at the Washington Office, but with slightly higher proportions at the District Offices (30%), and lower proportions at the Service Center (4%). The distribution by State Office varies substantially from the averages for all administrative staff, with far larger proportions located in the Washington Office, slightly higher in Arizona, California, and Colorado, but with somewhat lower proportions in almost all other States and the Fire Center.

There are 97 women and 32 minorities out of 408 miscellaneous administrative staff, both slightly fewer proportionally than for the total administrative population. There is a slight trend among the GS-301 category workers to have more education than the general administrative staff, with 57% holding bachelors degrees and 21% with masters degrees; while only half as many proportionally have no degree. The grade distribution tends to be higher than the average for administrative staff, with the largest concentration in the GS-12, 13 and 14 levels. Fifty-six percent of the miscellaneous administrative staff are supervisors, by far the highest rate among the administrative staff except for the Program Managers.

The distribution of retirement eligibility for miscellaneous administrative workers is unusual: the current decade and the next decade both show a bulge, suggesting a proportionally older population, but there are hardly any younger staff. The suggestion is that almost 20% of the staff will retire in the next 5 years, one of the highest among the occupations.

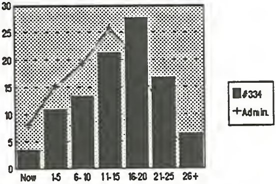
In the last three years, 51 miscellaneous administrative staff have been hired and 42 have left. Only a third of the new hires fill in the severe pinch of younger employees, the remainder make the bulge greater. Those leaving are fairly evenly distributed.



GS-334, Computer Specialist

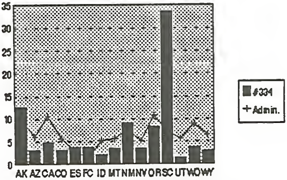
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



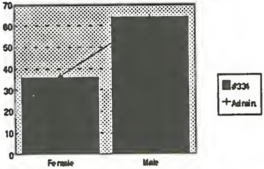
	Now	1-5	6-10	11-15	16-20	21-25	26+
#334	3.5	10.8	13.3	21.3	27.6	16.8	6.3
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#334 By States



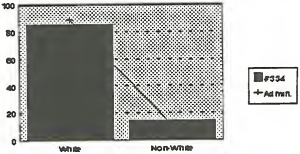
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NY	OR	SC	UT	WO	WY
#334	12.	3.2	4.8	3.2	3.8	3.8	2.2	3.5	9.2	3.5	8.3	33.	1.6	3.8	2.9
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4

#334 By Sex



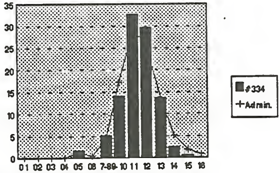
	Female	Male
#334	35.9	64.1
Admin.	36.3	63.7

#334 By Race



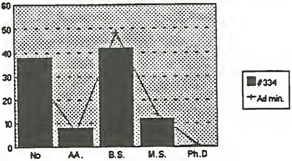
	White	Non-White
#334	85.4	14.6
Admin.	88.7	11.3

#334 By Grade



	01	02	03	04	05	08	7-8	9-10	11	12	13	14	15	16
#334	0	0	0	0	1.6	0	5.1	14	32.2	28.	13.2	2.5	0.8	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.2	29	26	13.	5.1	1.8	0.8

#334 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#334	37.8	7.9	41.9	12.1	0.3
Admin.	30.6	6.4	48.2	13.9	1

Computer Specialist

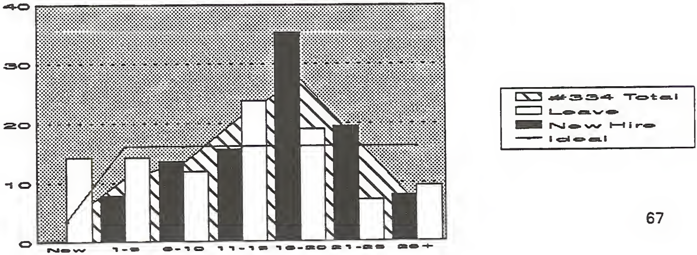
BLM had 315 computer specialists at the time the data was drawn. This is the fourth largest of the 12 administrative occupations with more than 50 staff, slightly smaller that program analyst and slightly larger than program managers.

The organizational distribution is dominated by the Service Centers (34%), fairly evenly distributed between the State (26%) and District Offices (19%), while the Washington office has only 4% and the Resource Area only 1%. With a third of these specialists at the Service Center, more than four times the average for all administrative occupations, the distribution in the States is necessarily lower than average but otherwise fairly even except for the concentration in Alaska, New Mexico and Oregon.

There are 113 female and 46 minorities out of 315 computer specialists, lightly fewer women but slightly more minorities than the proportional average for all administrative staff. Computer specialists are less educated that the average for all administrative workers, with a higher than average proportion having no college degree at all, only a slightly higher proportion with an associates degree, and with smaller than average proportions holding a bachelors degree or higher. The distribution by grade follows the same general pattern as for all administrative staff, but is slightly above average at the GS 11-12 level. Seventeen percent are supervisors.

Few computer specialists are eligible for retirement now, and fewer than average are eligible for the next 15 years, suggesting a generally younger population. The bulge occurs in those 16-20 years from eligibility.

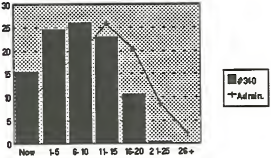
In the last three years, 51 computer specialists have been hired and 42 have left bringing about a statistically significant increase in the number of whites. While the new hires are fairly evenly distributed by retirement eligibility, the largest number of new hires are in the same 5 year increment as the bulge in the current population. Fourteen percent of those separating were eligible for retirement, more than twice the average. The remainder of the separations are roughly proportionate to the number at that age in the total occupation.



GS-340, Program Manager

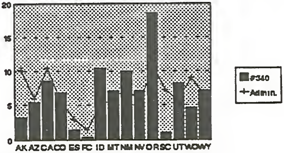
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



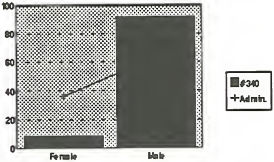
	Now	1-5	6-10	11-15	16-20	21-25	26+
#340	15.4	24.6	26.1	22.9	10.7	0.4	0
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#340 By States



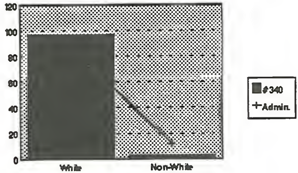
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#340	3.2	5.4	8.6	6.8	1.4	0.4	10.	7.1	10	7.1	18.	1.1	8.2	4.6	7.1
Admin.	10.3	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	6	8.4

#340 By Sex



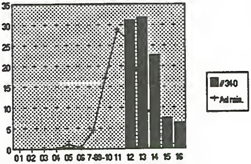
	Female	Male
#340	8.2	91.8
Admin.	36.3	63.7

#340 By Race



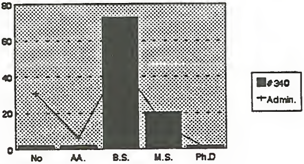
	White	Non-White
#340	97.5	2.5
Admin.	88.7	11.3

#340 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#340	0	0	0	0	0.4	0	0	0	0	31.3	31.	22.	7.5	6.4
Admin.	0	0	0	0	1.3	0.4	4.7	17	22.9	26	13.	5.1	1.8	0.8

#340 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#340	2.5	2.2	73.1	20.4	1.8
Admin.	30.6	6.4	48.2	13.9	1

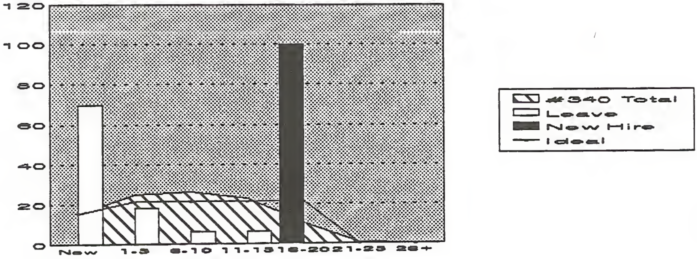
Program Manager

BLM had 280 program managers at the time the data was drawn. This is the fifth largest group of the 12 administrative occupations with more than 50 employees, slightly larger than outdoor recreation planners, but slightly smaller than the computer specialists. The Program Managers are the senior managers for the various programs, which leads to fairly unusual demographics regarding grade, education, age, and retirement eligibility.

The program managers are heavily centralized at the Resource Areas (with almost half of all such managers, 48%) and the District Offices (with 33%). The State Offices have 11%, while the Washington Office has 4%, and the Service Center has only 1%. The distribution by States differs from the general pattern for all administrative staff, with significantly higher representation in Oregon and Idaho, slightly higher proportions in Colorado, New Mexico, and Utah, and there are substantially lower than average proportions in the Eastern States and Alaska and slightly lower proportions in the remaining states.

There are 23 females and seven minorities among the 280 program managers, substantially fewer women (less than a fourth as many) and minorities (less than a fifth as many) than proportionally for all administrative staff. Program managers tend to be more highly educated than the average for all administrative employees, with 73% having bachelors degrees and over 20% with Masters degrees, both markedly higher than the average. They are far more concentrated in the higher grades than the proportional average, with virtually none in grades up through GS-11, slightly more GS-12s and significantly more GS 13s, 14s, 15s, and SES than the administrative average. Virtually all are supervisors.

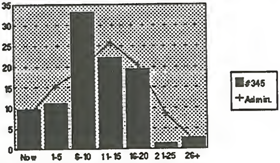
Program managers are only found in the older 20 years of retirement eligibility. Over 15% of program managers are currently eligible for retirement, twice as many as the average for all administrative staff, and the trend continues over the next 15 years. Even if those working past retirement eligibility continues at twice the average, about 25% of the top managers will retire in the next 5 years and another 25% in the next 5 years. A 50% loss in 10 years is the normal attrition for a group with only a 20 year span.



GS-345, Program Analyst

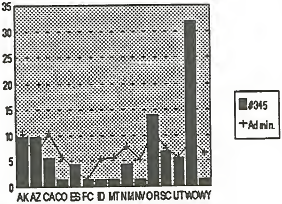
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



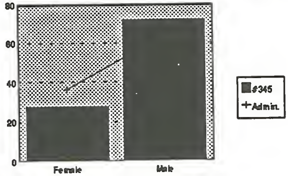
	Now	1-5	6-10	11-15	16-20	21-25	26+
#345	9.7	11.1	33.3	22.2	19.4	1.4	2.8
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#345 By States



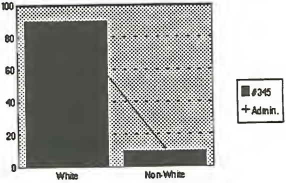
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#345	9.7	9.7	5.6	1.4	4.2	1.4	1.4	1.4	4.2	1.4	13.	6.9	5.6	31.	1.4
Admin.	10	6	10	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4

#345 By Sex



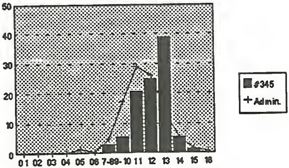
	Female	Male
#345	27.8	72.2
Admin.	36.3	63.7

#345 By Race



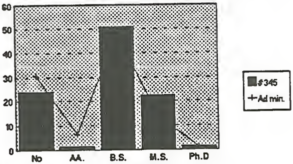
	White	Non-White
#345	90.1	9.9
Admin.	88.7	11.3

#345 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#345	0	0	0	0	0	0	2.8	5.6	20.	25	38.	5.6	1.4	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.2	29	26	13.	5.1	1.8	0.8

#345 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#345	23.9	1.4	50.7	22.5	1.4
Admin.	30.6	6.4	48.2	13.9	1

Program Analyst

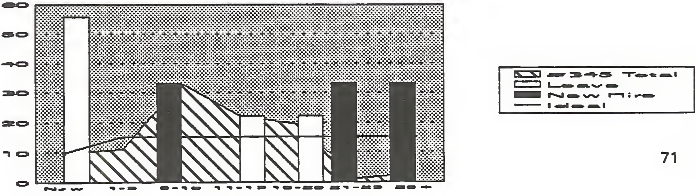
BLM had 72 program analysts at the time the data was drawn. This group is ranked 11th of the 12 administrative occupations with more than 50 employees. It is slightly larger than investigators and slightly smaller than environmental protection specialists. This series draws from a variety of occupations and often provides an alternate career path.

The program analysts are primarily located in and evenly distributed between the State Offices and the Washington Office, with 33% and 32% respectively. There is a smaller presence in the District Offices (17%) and the Service Center (7%) and there are none at the Resource Areas. The distribution by State Office varies widely from the general pattern: with more than 3 times the average in the Washington Office and half again the average in Oregon and Arizona, most of the other States are below average.

There are 20 females and seven minorities, somewhat fewer females and slightly fewer minorities proportionally than in the total administrative population. There is a slight trend among program analyst to have more education than the average administrative workers, with a little more than half with bachelors degrees, and slightly higher averages for masters degrees and higher. Far fewer than average are likely to have associates degrees, and somewhat fewer than the average proportion have no degree. The grade distribution is sharply skewed toward the higher grades, with the mode at GS 13 and hardly any below GS 11. Eighteen percent of program analysts are supervisors.

The distribution of retirement eligibility follows the general pattern for all administrative staff -- a bulge between two pinches -- but the bulge is much wider with a third at 6-10 years from retirement eligibility. There are hardly any analysts in the youngest decade, suggesting that the entry level may be mid-career.

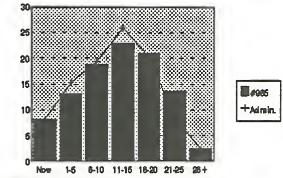
In the last three years, three program analysts have been hired and nine have separated. More than half of those leaving were eligible for retirement, with the remainder of those separations evenly distributed across the years where there is an appreciable number of analysts.



GS-965, Land Law Examiner

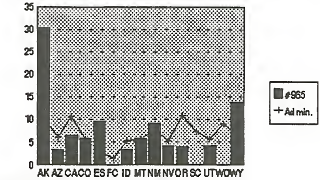
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



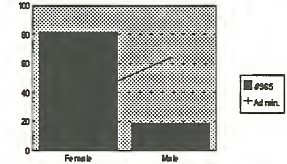
	Now	1-5	6-10	11-15	16-20	21-25	26+
#965	8.1	13.1	18.7	22.9	20.9	13.7	2.5
Admin.	8.1	15.2	19.4	25.9	20.4	8.8	2.3

#965 By States



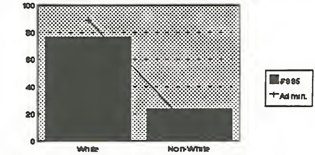
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#965	30.	3.4	6.4	5.9	9.5	0	3.4	5.9	9.2	42	3.9	0	42	0	13.
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4

#965 By Sex



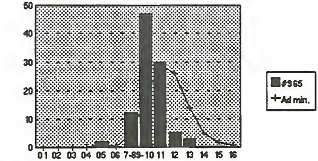
	Female	Male
#965	81.6	18.4
Admin.	36.3	63.7

#965 By Race



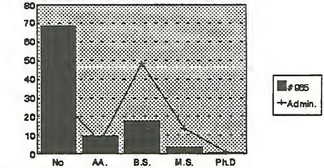
	White	Non-White
#965	76.5	23.5
Admin.	88.7	11.3

#965 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#965	0	0	0	0	2	0	12.	46.	29.	5.3	3.1	0.3	0.3	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.2	29	26	13.	5.1	1.8	0.8

#965 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#965	68.3	9.8	17.9	3.4	0.6
Admin.	30.6	6.4	48.2	13.9	1

Land Law Examiner

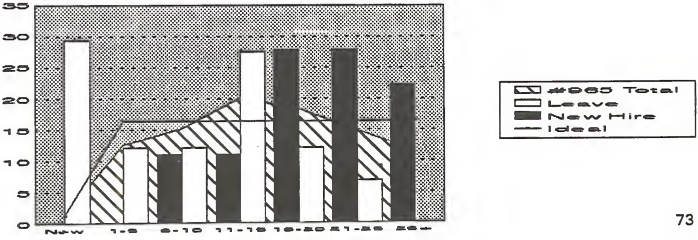
BLM had 358 land law examiners at the time the data was drawn. This is the second largest group of the 12 administrative occupations with more than 50 employees, smaller that the miscellaneous administrative and program staff, and slightly larger than the realty specialists.

Organizationally, the examiners are primarily located in the State Offices with 54%; District Offices have 11%, Resources Areas 5%, while there are none at the Washington Office or the Service Center. The distribution by States varies from the general pattern for all administrative staff, with the three times the ratio in Alaska and slightly higher proportions in the Eastern States, New Mexico and Wyoming. There are markedly lower percentages in Arizona, California, Idaho and Oregon, and slightly lower percentages the remaining State Offices.

There are 294 females and 84 minorities among the 358 land law examiners, more than double the percentages for both women and minorities than the proportion in the general administrative population and the highest among all administrative occupations. The examiners are less educated than the other occupations among the administrative workers, with three times the proportional average of examiners with no degree, less than half as many with bachelors degrees, less than a fourth as many with masters degrees, and about half as many PhDs. The grades are heavily concentrated in the GS 9-11 range, with dramatically fewer than average at GS 12 or above. Fourteen percent are supervisors.

The distribution by retirement eligibility is very close to average, slightly skewed toward a younger population.

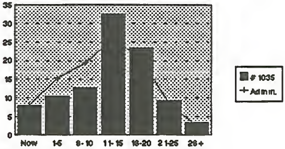
In the last three years, 18 land law examiners have been hired and 58 have separated (although the total has come back up since then). Over 75% of the new hires have been at least 16 years from retirement eligibility. Almost 30% of those who separated were retirement eligible, the rest were evenly distributed except for a bulge at 11-15 years.



GS-1035, Public Affairs

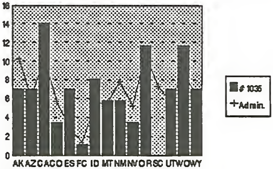
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



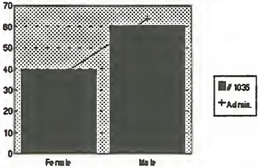
	Now	1-5	6-10	11-15	16-20	21-25	26+
# 1035	8.1	10.5	12.8	32.8	23.3	9.3	3.5
Admin.	8.1	15.2	19.4	25.9	20.4	8.9	2.3

#1035 By States



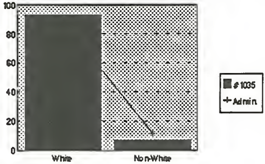
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
# 1035	7	7	14	3.5	7	1.2	8.1	5.8	5.8	3.5	11.6	0	7	11.6	7
Admin.	10	2.6	10.5	5.7	3	1.4	5.3	5.8	7.8	5.2	10.7	7.3	5.8	9	3.4

#1035 By Sex



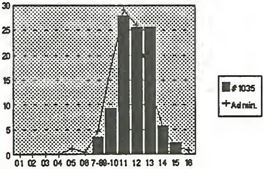
	Female	Male
# 1035	39.5	60.5
Admin.	36.3	63.7

#1035 By Race



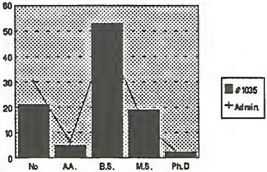
	White	Non-White
# 1035	93	7
Admin.	88.7	11.3

#1035 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
# 1035	0	0	0	0	0	0	3.5	9.3	27.9	25.5	25.5	5.8	2.3	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.2	29	26	13.5	5.1	1.8	0.8

#1035 By Degree



	No	AA.	B.S.	M.S.	Ph.D
# 1035	21.2	4.7	52.9	18.8	2.4
Admin.	30.6	6.4	48.2	13.9	1

Public Affairs

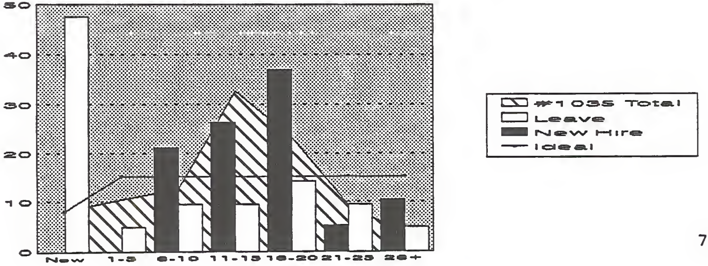
BLM had 86 public affairs staff (this includes grades 5-15 in the public affairs series) at the time the data was drawn. This is the 9th largest of the 12 administrative occupations with more than 50 employees, only slightly larger than the environmental protection specialist and slightly smaller than contracting employees.

Organizationally, the public affairs staff are concentrated in the State Offices with 47%, followed by the District Offices with 33%. The Washington Office has 12%, the Resource Areas 1%, and there are none at the Service Center. The distribution of public affairs staff by State varies from the distribution of the all administrative workers, with significantly higher percentages in California, the Eastern States, Idaho, and Oregon, and with markedly lower percentages Alaska, Colorado, and New Mexico.

There are 34 females and six minorities, about the same percentage of females but a somewhat lower percentage of minorities than in the general administrative population. The public affairs staff is generally slightly more educated than the composite administrative staff, with higher percentages having bachelors degrees and higher. The grade distribution for public affairs staff follows the general pattern for all administrative staff, skewed toward higher grades with about double the average number of GS 13s. Twenty six percent of the public affairs staff are supervisors.

The distribution of retirement eligibility follows the general pattern for all administrative staff -- a bulge between two pinches -- skewed toward a younger population with significantly fewer for the next 10 years, a concentration at 11-15 years, and slightly higher averages for the younger staff.

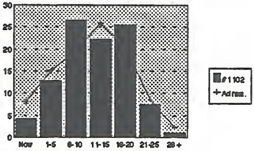
In the last three years, 19 public affairs staff have been hired and 21 have separated. Most of the new hires are concentrated in the bulge years. About half of those separating were retirement eligible, with the remainder distributed evenly.



GS-1102, Contracting

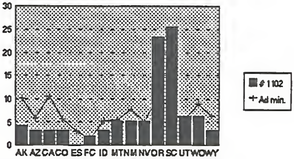
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



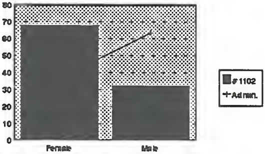
	Now	1-5	6-10	11-15	16-20	21-25	26+
#1102	4.3	12.8	26.8	22.3	25.5	7.4	1.1
Admin.	8.1	15.2	18.4	25.8	20.4	5.8	2.3

#1102 By States



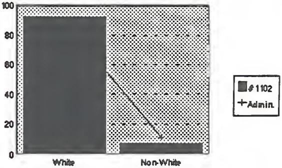
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#1102	4.3	3.2	3.2	3.2	0	2.1	3.2	5.3	5.3	5.3	23.	25.	6.4	6.4	3.2
Admin.	10.2	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.7	3	5.6	9	6.4

#1102 By Sex



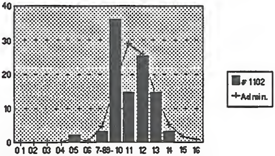
	Female	Male
#1102	68.1	31.8
Admin.	36.3	63.7

#1102 By Race



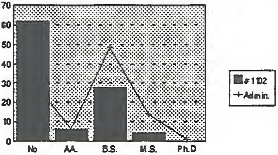
	White	Non-White
#1102	92.6	7.4
Admin.	88.7	11.3

#1102 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#1102	0	0	0	0	2.1	0	3.2	36.2	14.	25.5	14.	3.2	0	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.2	29	26	13.	5.1	1.8	0.8

#1102 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#1102	61.7	6.4	27.7	4.3	0
Admin.	30.6	6.4	48.2	13.9	1

Contracting Specialist

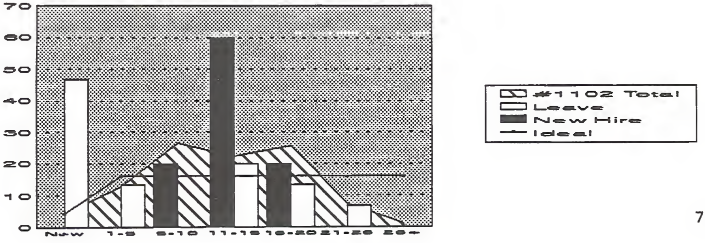
BLM had 94 contracting specialists at the time the data was drawn. This is the 8th largest group of the 12 administrative occupations which have more than 50 employees. It is slightly larger than the public affairs staff and slightly smaller than the inspections and compliance staff.

The organizational placement of the contracting specialists is primarily at the State Offices with 36%, and District Offices and the Service Center with 26% each. There are none at the Resource Areas, while the Washington Office has 6%. The distribution by States varies widely from the general pattern for all administrative employees. Oregon has a significantly higher proportional while the Eastern States have none, and almost all other states have decidedly lower percentages than average for the total administrative staff.

There are 64 females and seven minorities among the 94 specialists, more women but significantly fewer minorities than the proportional average for all administrative staff. Contract specialists are decidedly less educated than the overall administrative workers, with twice as many proportionally with do degree, less than half as many the specialists having a bachelors degree, far fewer having masters degrees and none with a PhD. The grade distribution is skewed toward lower grades with twice the average number of GS 9s but half the number of GS 11s as average, while other grades are about average. There are no contracting specialists at GS 15 or SES. Twenty eight percent are supervisors.

The distribution of retirement eligibility follows the general pattern -- a bulge between two pinches -- but the bulge is somewhat broader, extending from 6-20 years from eligibility.

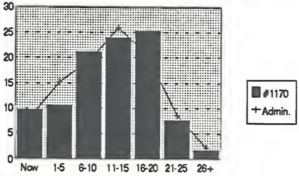
In the last three years, five contracting specialists have been hired and 15 have separated bringing a significant increase in the number of men and improvement in education. All new hires were in the bulge of retirement eligibility. Forty seven percent of those separating were eligible to retire, while the remainder were distributed roughly in proportion to the occupation population.



GS-1170, Realty Specialist

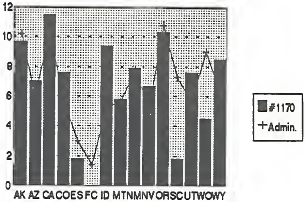
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



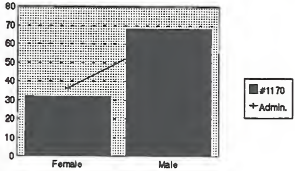
	Now	1-5	6-10	11-15	16-20	21-25	26+
#1170	9.7	10.6	21.2	23.9	25.2	7.6	1.8
Admin.	8.1	15.2	19.4	25.9	20.4	8.6	2.3

#1170 By States



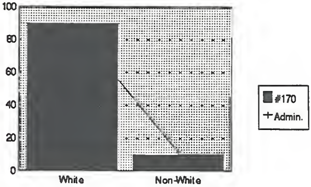
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#1170	9.7	7	11.	7.6	1.8	0	9.4	5.8	7.9	6.7	10.	1.8	7.6	4.5	8.5
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10.	7.3	5.6	9	6.4

#1170 By Sex



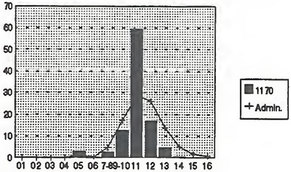
	Female	Male
#1170	31.8	68.2
Admin.	36.3	63.7

#1170 By Race



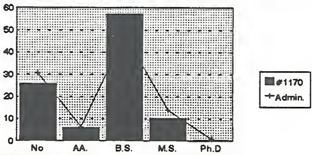
	White	Non-White
#170	90	10
Admin.	88.7	11.3

#1170 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
1170	0	0	0	0	3	0	2.7	12.	59.	17	4.8	0.3	0	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.	29	26	13.	5.1	1.8	0.8

#1170 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#1170	25.9	6.1	57.3	10.4	0.3
Admin.	30.6	6.4	48.2	13.9	1

Realty Specialist

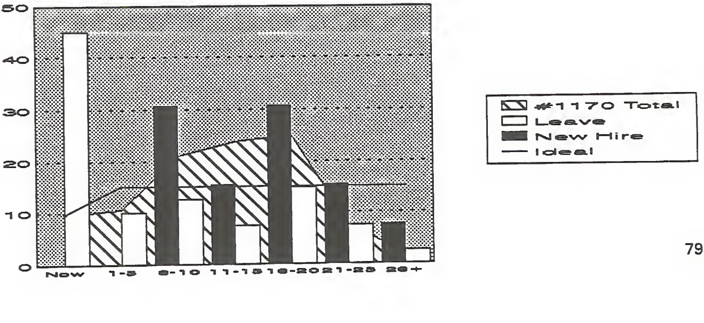
BLM had 330 realty specialists at the time the data was drawn. This is the third largest of the 12 administrative occupations with more than 50 employees. It is only slightly larger than computer specialists, and slightly smaller than land law examiners.

The realty specialists are concentrated in the Regional Areas with 49%, followed by District Offices with 20% and State Offices with 13%. The Washington Office has 6% while the Service Center and Fire Center each have about 2%. The distribution by State Offices varies the general pattern for all administrative staff, except for double the average in Idaho and half the average in the Service Center, Eastern States and the Washington Office.

There are 105 females and 33 minorities out of 330 realty specialists, somewhat fewer females than the proportional average for all administrative employees but about average for minorities. The majority of realty specialists have bachelors degrees, while fewer than average proportionally have higher degrees or no degree. The grade distribution for realty specialists is highly concentrated at GS 11. There are no realty specialists above the GS 13 level. Only seven percent are supervisors, the lowest percentage for all of administration, along with outdoor recreation planners.

The distribution of retirement eligibility follows the general pattern for all administrative staff -- a bulge between two pinches -- however, the bulge is broader and slightly skewed to a younger population.

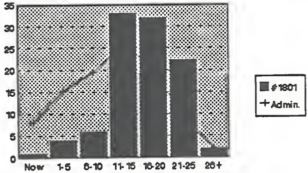
In the last three years, 13 realty specialists were hired and 40 separated, a significant decline. Most of the new hires were in the bulge of retirement eligibility. Forty five percent of those separating were eligible to retire, an unusually high proportion, while the remainder were distributed fairly evenly.



GS-1801, Inspections and Compliance

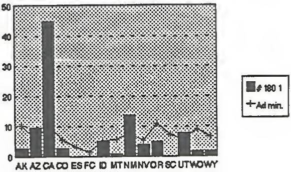
All Figures in Percent, Comparison To All Administratives

Years To Retire Eligible



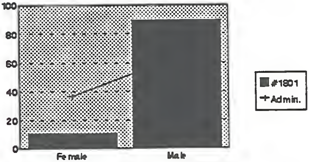
	Now	1-5	6-10	11-15	16-20	21-25	26+
#1801	1	3.9	5.8	33	32	22.3	1.9
Admin.	8.1	15.2	19.4	25.9	20.4	6.6	2.3

#1801 By States



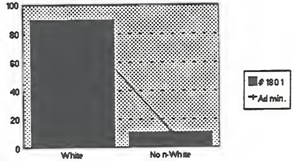
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#1801	2.9	9.7	44.	2.9	0	0	4.9	1	13.	3.9	4.9	0	7.8	1.9	1.9
Admin.	10.5	6	10.5	5.7	3	1.4	5.3	5.6	7.8	5.2	10.8	7.3	5.6	9	6.4

#1801 By Sex



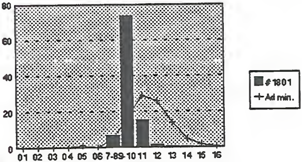
	Female	Male
#1801	10.7	89.3
Admin.	36.3	63.7

#1801 By Race



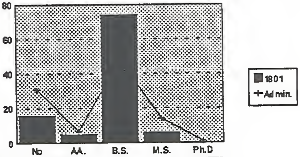
	White	Non-White
#1801	89.3	10.7
Admin.	88.7	11.3

#1801 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#1801	0	0	0	0	0	0	6.8	73.	15.	1.9	1	1	0	0
Admin.	0	0	0	0	1.3	0.4	4.7	17.	29	26	13.	5.1	1.8	0.8

1801 By Degree



	No	AA.	B.S.	M.S.	Ph.D
1801	15.5	4.9	73.8	5.8	0
Admin.	30.6	6.4	48.2	13.9	1

Inspections and Compliance Staff

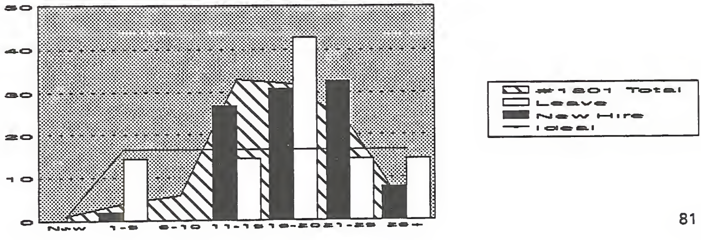
BLM had 103 inspections and compliance staff at the time the data was drawn. This is the 7th largest of the administrative occupations which have more than 50 employees, slightly larger than contracting specialists, but smaller than outdoor recreation planners.

The organizational distribution of inspections and compliance staff is heavily centralized at the Resource Areas with 67%. Twenty five percent are located at District Office, with only 3% at State Office, 2% at the Washington Office, and none at the Service Center or Fire Center. The distribution by State Office differs significantly from the general pattern for all administrative staff. The largest concentration is in California, with four times the average, while New Mexico also has half again the average population. There are notably fewer inspections and compliance staff in almost all other states and none at Eastern States.

There were 11 females and nine minorities among the 103 investigators, far fewer women but about the same percentage of minorities as the proportional average for the overall administrative population. The inspections and compliance staff is better educated than the average for administrative staff, with half again more bachelors degrees although fewer masters and doctors. The grade distribution is highly concentrated at GS 9, with only half the average proportion at GS 11 and hardly any above that level. Nine percent are supervisors, the second lowest average in all administrative occupations.

The distribution of retirement eligibility is evenly concentrated in the 11-25 years to eligibility, with less than 15% of the occupation outside that range.

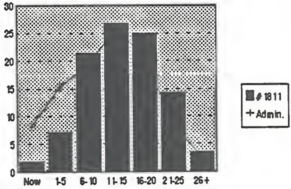
In the last three years, 52 compliance staff have been hired and seven have separated, bringing a significant increase in the number of males. The new hires are heavily concentrated in the bulge of retirement eligibility, as is most of the turnover. No one who left was retirement eligible.



GS-1811, Investigators

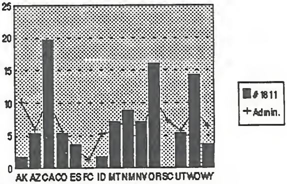
All Figures In Percent, Comparison To All Administratives

Years To Retire Eligible



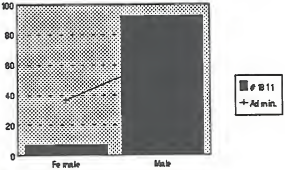
# 1811	1.8	7.1	21.4	26.8	25	14.3	3.6
Admin.	8.1	152	19.4	25.9	20.4	8.6	2.3

#1811 By States



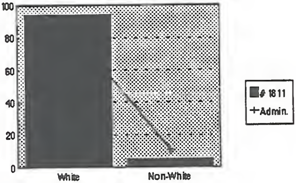
# 1811	1.8	5.4	19.	5.4	3.6	0	1.8	7.1	8.9	7.1	16.	10	5.4	14.	3.6
Admin.	10.	6	10.	5.7	3	1.4	5.3	5.6	7.8	5.2	10	7.3	5.6	9	6.4

#1811 By Sex



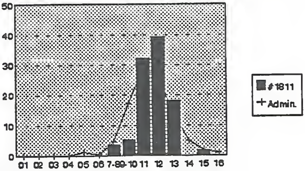
# 1811	7.1	92.9
Admin.	36.3	63.7

#1811 By Race



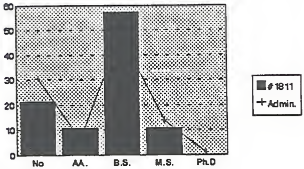
# 1811	94.6	5.4
Admin.	88.7	11.3

1811 By Grade



# 1811	0	0	0	0	0	0	3.6	5.4	32.	39.	17.	0	1.8	0
Admin.	0	0	0	0	1.3	0.4	4.7	17	229	26	13.	5.1	1.8	0.8

#1811 By Degree



# 1811	21.4	10.7	57.1	10.7	0
Admin.	30.8	6.4	48.2	13.9	1

Investigators

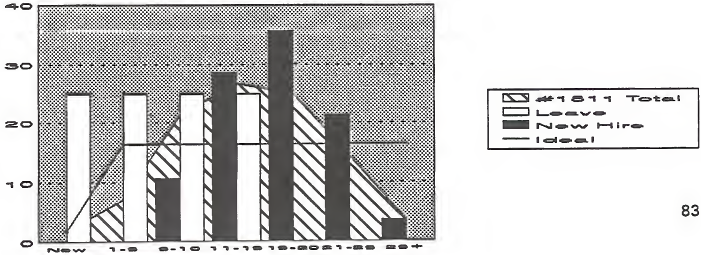
BLM had 56 investigators at the time the data was drawn. This is the smallest of the 12 administrative occupations with more than 50 employees.

The investigators are concentrated at the State Offices, with none in either the Resources Areas or the District Offices. There are 14% at the Washington Office. The distribution by State differs substantially from the general pattern for all administrative staff. There are significantly higher proportional percentages in California and Oregon; there are also significantly lower percentages in Alaska, Idaho, Wyoming and the Fire Center, and none at the Service Center.

There are four females and three minorities among the 56 investigators, the lowest proportional average for women of all administrative occupations; and about half as many minorities proportionally as in the entire administrative population. Investigators tend to be slightly better educated than the general administrative population, with more holding a bachelors degree but fewer holding either no college degree or a masters. The grade distribution for investigators follows the same general pattern for all administrative staff, but somewhat skewed toward the higher grades with half again more GS 12s than average but substantially fewer 9s or 14s. Only 16% are supervisors, one of the lower percentages in the administrative occupations.

The distribution of retirement eligibility for investigators also follows the general pattern -- a bulge between two pinches -- but is skewed toward younger ages, with dramatically fewer currently eligible or reaching eligibility in the next 5 years.

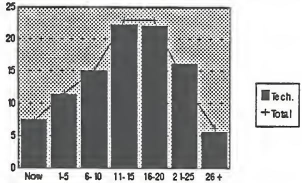
In the last three years, 28 investigators have been hired and 4 have separated, a significant increase. Virtually all new hires are concentrated in the retirement eligibility bulge, while the separations are evenly distributed from currently eligible through 15 years from eligibility.



PATCO TECHNICALS

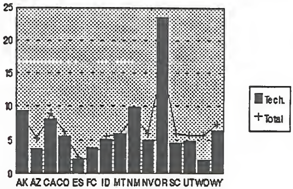
All Figures In Percent, Comparison To All Employees

Years To Retire Eligible



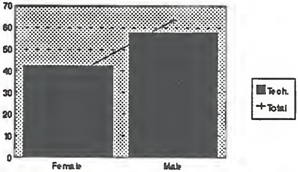
	Now	1-5	6-10	11-15	16-20	21-25	26+
Tech.	7.5	11.3	15	22.1	22	16	5.6
Total	7.3	11.4	15	22.9	22.9	12.8	6.2

By States



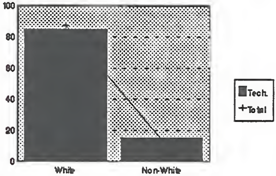
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
Tech.	9.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.	4.5	4.8	2	6.4
Total	8.4	5.2	9	6.2	2.4	1.8	5.5	6	8.6	5.9	16.	6	5.7	5.7	7.4

By Sex



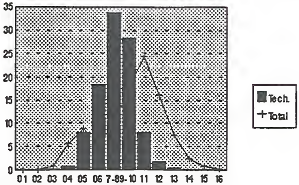
	Female	Male
Tech.	42.4	57.6
Total	36.7	63.3

By Race



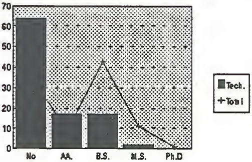
	White	Non-White
Tech.	84.7	15.3
Total	87	13

By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
Tech.	0	0	0.3	0.9	8	18.	33.	28.	8.1	1.8	0.4	0	0	0
Total	0	0.1	0.8	5.6	8.8	52	10.	17.	24.5	16.	7.5	2.4	0.8	0.3

By Degree



	No	A.A.	B.S.	M.S.	Ph.D
Tech.	63.9	17.2	17.2	1.7	0.1
Total	36.2	8.8	42.9	11.1	1

IX. TECHNICAL OCCUPATIONS

Overview

BLM had 1,738 individuals in the PATCO category of technical occupations at the time the data was drawn. It is the third largest of the PATCO categories, 1300 smaller than administrative, 1200 smaller than professional, and about 500 larger than clerical. A total of eight technical categories have more than 50 members, the threshold for detailed analysis in this report. The smaller technical occupations such as guard, social science trainee, computer operator, biology technician, health technician, animal health technician, engineering drafting, and museum technician have not been described here, but are included in the summary data about technical staff.

The distribution of technical employees by organizational level is divided fairly evenly among the Resource Areas with 28%, District Offices also with 28%, and State Offices with 25%. The distribution by State Offices follows the general pattern for all BLM workers, with the exceptions that there are substantially more in Oregon and markedly fewer in the Washington Office.

Of the 1,738 technical employees, there are 737 females and 266 minorities, proportionally somewhat more women and minorities than in other PATCO categories. The educational level of technical employees is significantly less than professional and administrative categories, but slightly higher than clerical occupations. They are twice as likely to have no degree. The lower level is primarily because personnel clerks, legal instrument examiners and electronic technicians are included; other technicians have somewhat higher educational levels. The grade distribution for technical workers is a bell shape which is skewed lower than professional and administrative categories, with about 80% of the technical staff clustered in grades 6-10, peaking at grades 7-8, while the peak for all other categories is GS 11. There are virtually none at or below GS 4 and very few at GS 12 or above. Only 11% of technical staff are supervisors, the lowest percentage of all PATCO categories including clericals.

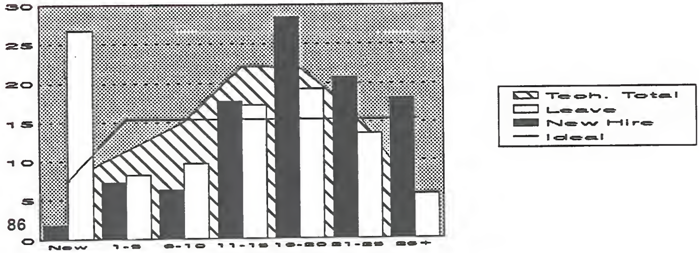
The distribution of technical staff by retirement eligibility is approximately the same as for all PATCO categories -- a bulge between two pinches -- with a very small trend to later eligibility. Over the next ten years, this group will be eligible to retire at about the same rate as the total for all BLM workers.

Over the last three years, 222 new technical workers have been hired and 281 have left. 27% of those leaving were retirement eligible, most of the remainder were at mid-career. About half the new hires are in what is already a bulge of retirement eligibility, but the other half are younger suggesting a good long term preparation.

Of the 222 new technical workers, there has been little statistically significant change in demographics. Legal instrument examiners have decreased the number with no college, and purchasing agents have increased the number of males. At a lower significance level, range technicians have decreased the number with a bachelors degree. It may be reasonable to review if more directed recruitment is appropriate.

Of all the PATCO categories, the technicals most closely follow the average for retirement eligibility. It is worth noting, however, that 11% of the forestry technicians are currently eligible for retirement and another 15% will become so over the next 5 years. Similarly, 12% of the purchasing agents are currently eligible and another 13% become eligible over the next 5 years. These may suggest areas for focused recruitment.

At the other end of the recruitment eligibility, only 7% of the engineering technicians and 12% of the electronics technicians are more than 20 years from retirement eligibility. This is significantly below the 33% that would be of this age in a flat distribution, suggesting that additional efforts to provide for an even flow of experienced workers may be needed.



The grade levels for technicians are significantly different than for professionals and administrative PATCO categories. This report did not develop appropriate standards for determining if there is a bulge in competition at the lower grades of technicians. The absence of comment on this topic should not be taken as an indication that no problem exists.

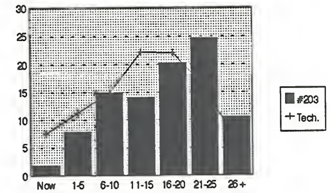
In the demographics grade charts, grades 7 and 8 were combined as were grades 9 and 10. This was sensible for the professional and administrative categories, so the same format was maintained for technical and clerical to facilitate comparisons. In future analysis it would be appropriate to show each grade separately for technical and clerical categories, as this gives a clearer picture of their career path.

GS-203, Personnel Clerks

All Figures In Percent, Comparison To All Technicals

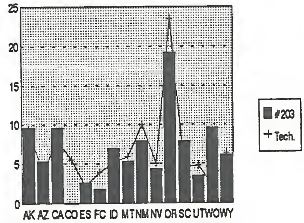
Includes 49% Clerical

Years To Retire Eligible



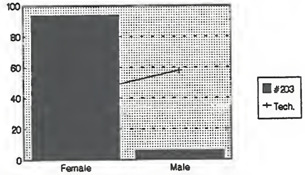
	Now	1-5	6-10	11-15	16-20	21-25	26+
#203	1.8	7.9	14.9	14	20.2	24.6	10.5
Tech.	7.5	11.3	15	22.1	22	16	5.6

#203 By States



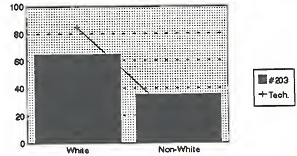
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#203	9.6	5.3	9.6	0	2.6	1.8	7	5.3	7.9	4.4	19.	7.9	3.5	9.6	6.1
Tech.	9.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.	4.5	4.8	2	6.4

#203 By Sex



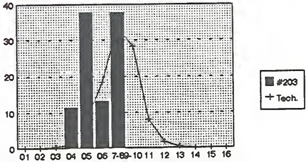
	Female	Male
#203	93.9	6.1
Tech.	42.4	57.6

#203 By Race



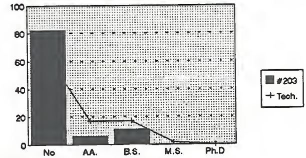
	White	Non-White
#203	64.9	35.1
Tech.	84.7	15.3

#203 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#203	0	0	0	11.4	37.	13.2	37.	0	0	0	0	0	0	0
Tech.	0	0	0.3	0.9	8	18.4	33.	26.	8.1	1.8	0.4	0	0	0

203 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#203	82.5	6.1	11.4	0	0
Tech.	63.9	17.2	17.2	1.7	0.1

Personnel Clerk

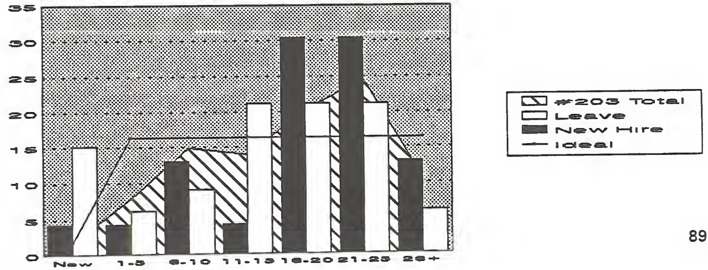
BLM had 144 personnel clerks at the time the data was drawn. This is the sixth largest of the eight technical occupations with more than 50 employees, more than purchasing agents, but slightly less than legal instrument examiners. Half are classified in the PATCO clerical category and half in technical, but all are grouped here to simplify analysis.

The organizational distribution for personnel clerks is evenly divided between the District and State Offices with 35% each, while there is only one percent at the Resource Areas. 10% are at the Washington Office and 8% at Service Center. The distribution by States generally follows the pattern for all technical staff, but with four times the average in the Washington Office but none in Colorado (which received personnel support from the Service Center).

There are 107 females and 40 minorities among the 114 personnel clerks, far more than double the proportional average of women, and three times as many minorities -- the highest representation of both females and minorities throughout technical occupations. Personnel clerks are less well educated than the proportional average for all technical workers, clearly more likely to have no degree. The grade distribution shows two peaks, one at GS 5 and one at GS 7, presumably the technical and clerical groups. Only 5% of clerks are supervisors.

The distribution of personnel clerks by retirement eligibility shows complex variation from the general pattern for all technical employees. This occupation is substantially younger than average for technical occupations with a bulge at 21-25 years from retirement.

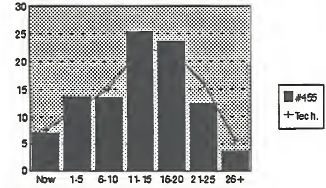
In the last three years, 23 personnel clerks have been hired and 33 have separated. Of the new hires, most have been hired in the group 16-25 years from retirement eligibility, but about 27% of the new hires are either eligible for retirement now or within the next ten years. Of those leaving, 15% were eligible for retirement, but there were about 21% each in the groups 11-15, 16-20 and 21-25 years from eligibility, a trend for early to mid-career turnover.



GS-455, Range Technician

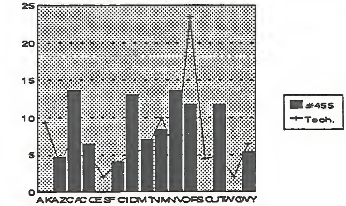
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



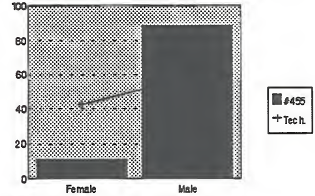
	Now	1-5	6-10	11-15	16-20	21-25	26+
#455	7.1	13.6	13.6	25.4	23.7	12.4	3.6
Tech.	7.5	11.3	15	22.1	22	16	5.6

#455 By States



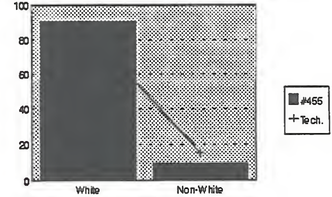
#455	0	4.7	13	6.6	0	4.1	13	7.1	8.3	13	11	0	11	0	5.3
Tech.	9.4	3.3	3.1	5.5	2.1	3.8	5.7	5.9	10	5	23	4.5	4.8	2	3.4

#455 By Sex



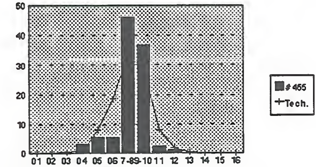
	Female	Male
#455	11.2	88.8
Tech.	42.4	57.6

#445 By Race



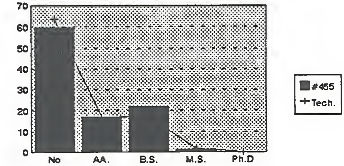
	White	Non-White
#455	90.5	9.5
Tech.	84.7	15.3

#455 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#455	0	0	0	3	5.3	5.3	46.2	36.7	2.4	1.2	0	0	0	0
Tech.	0	0	0.3	0.9	8	18.4	33.8	28	3.1	1.8	0.4	0	0	0

#455 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#455	59.8	17.2	21.9	1.2	0
Tech.	63.9	17.2	17.2	1.7	0.1

Range Technicians

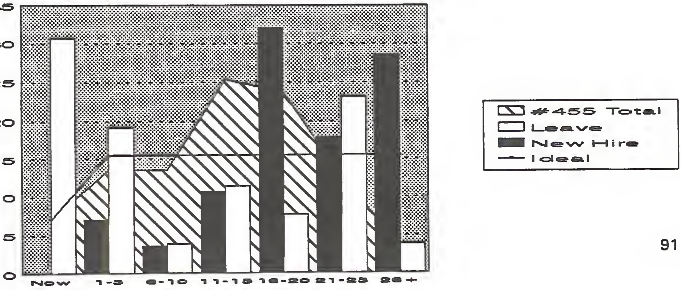
BLM had 169 range technicians at the time the data was drawn. This is the fourth largest of the eight technical occupations which have more than 50 employees. It is slightly larger than legal instrument examiners and somewhat smaller than cartographic technicians.

The distribution for range technicians by organization is concentrated at the Resource Areas with 49% and District Offices with 43%. Only 4% are located at State Offices. The distribution by States varies substantially from the general pattern for all technical employees, with far more range technicians in California, Idaho, Nevada and Utah. There are far fewer proportionally than for all technical workers at Oregon; there are no range technicians in Alaska, Eastern States, the Service Center or the Washington Office.

There were 19 females and 16 minorities among the 169 range technicians, dramatically fewer women and only half as many minorities proportionally as for all technical workers. Overall, range technicians tend to be slightly better educated than the average for all technical workers, with slightly more four year degrees and slightly fewer with no college degree. The grade distribution for range technicians follows the same general pattern as for all technical workers but is concentrated in the GS 7-9 grades. 18% of the range technicians are supervisors, the highest percentage for all technical occupations.

The distribution of range technicians by retirement eligibility follows the general pattern closely.

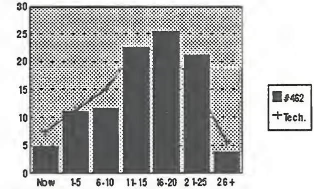
In the last three years, 28 range technicians have been hired and 26 have separated. Almost all of the hiring has been at least 15 years from retirement eligibility, although the peak is in the bulge of current staff. Over 30% of those leaving were eligible for retirement and another 20% would have been within the next 5 years. Almost a third of those leaving were in the first decade of employment.



GS-462, Forestry Technician

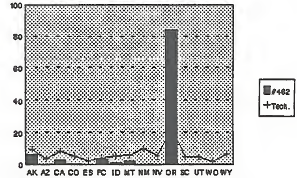
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



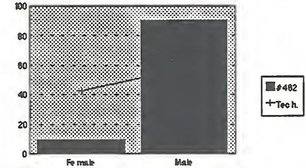
	Now	1-5	6-10	11-15	16-20	21-25	26+
#462	4.8	11	11.5	22.5	25.4	21.1	3.8
Tech.	7.5	11.3	15	22.1	22	16	5.6

#462 By States



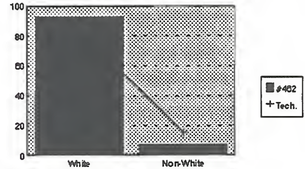
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#462	8.2	0	2.8	0.5	0	3.3	1	2.4	0	0	83.7	0	0	0	0
Tech.	8.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.4	4.5	4.8	2	6.4

#462 By Sex



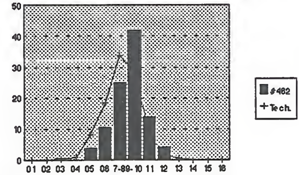
	Female	Male
#462	9.6	90.4
Tech.	42.4	57.6

#462 By Race



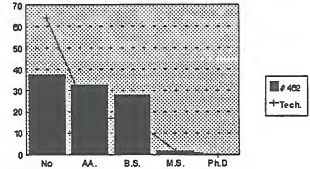
	White	Non-White
#462	92.8	7.2
Tech.	84.7	15.3

#462 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#462	0	0	0.5	0	3.8	10.5	24.9	42.	13.9	4.3	0	0	0	0
Tech.	0	0	0.3	0.8	8	18.4	33.2	28.3	8.1	1.8	0.4	0	0	0

#462 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#462	37.5	32.7	27.9	1.9	0
Tech.	63.9	17.2	17.2	1.7	0.1

Forestry Technician

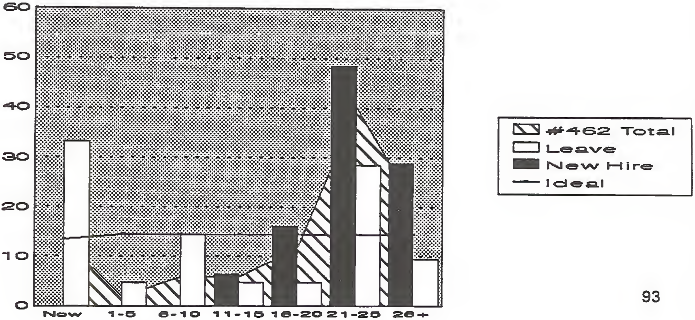
BLM had 209 forestry technicians at the time the data was drawn. This is the second largest of the eight technical occupations with more than 50 employees, somewhat smaller than engineering technicians but larger than cartographic technicians.

The distribution of forestry technicians by organization is solidly concentrated at the Resource Areas with 75%, while the District Offices have only 13% and the State Offices just 2%. The distribution by States differs widely from the general pattern for all technical workers, with dramatically more in Oregon. There are none at all in Arizona, Colorado, Eastern States, New Mexico, Nevada, Utah and Wyoming; and none at the Service Center or the Washington Office.

There are 20 females and 15 minorities among the 209 forestry technicians, dramatically fewer women and only half as many minorities proportionally as for all technical staff. Forestry technicians are significantly better educated than average for most technical workers, with around double the average number of associate and bachelors degrees, while only half the number with no college. The grade distribution pattern for forestry technicians follows the same general pattern as for all technical workers, but is somewhat skewed to higher grades with half again more GS 9s than average. 11% of forestry technicians are supervisors.

The distribution to retirement eligibility for forestry technicians also follows the same general pattern as for all technical workers -- a bulge between two pinches -- but is slightly skewed toward a younger population.

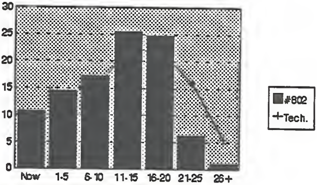
In the last three years, 31 forestry technicians have been hired and 21 have separated. Almost 80% of the new hires were more than 20 years from retirement eligibility. A third of those leaving were retirement eligible, but a larger portion were more than 20 years from retirement.



GS-802, Engineering Technician

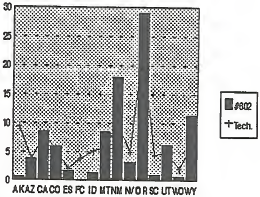
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



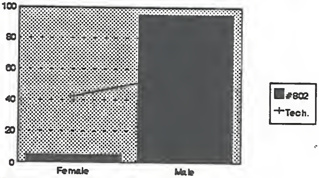
	Now	1-5	6-10	11-15	16-20	21-25	26+
#802	10.7	14.5	17.2	25.5	24.8	6.2	1
Tech.	7.5	11.3	15	22.1	22	16	5.6

#802 By States



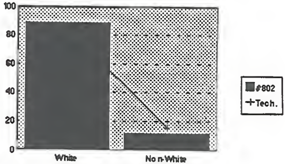
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#802	0.7	3.8	8.6	5.9	1.7	0	1.4	8.6	17.8	3.1	29	1	6.2	0.7	11.4
Tech.	9.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.9	4.5	4.8	2	6.4

#802 By Sex



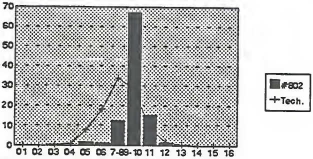
	Female	Male
#802	4.8	95.2
Tech.	42.4	57.6

#802 By Race



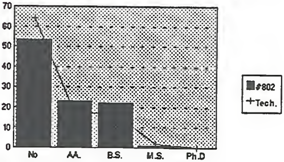
	White	Non-White
#802	88.9	11.1
Tech.	84.7	15.3

#802 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#802	0	0	0.3	0	1.7	1.4	12.8	66.9	15.2	1.4	0.3	0	0	0
Tech.	0	0	0.3	0.9	8	18.4	33.8	28.3	8.1	1.8	0.4	0	0	0

#802 By Degree



	No	A.A.	B.S.	M.S.	Ph.D
#802	53.5	23.3	22.2	1	0
Tech.	63.9	17.2	17.2	1.7	0.1

Engineering Technicians

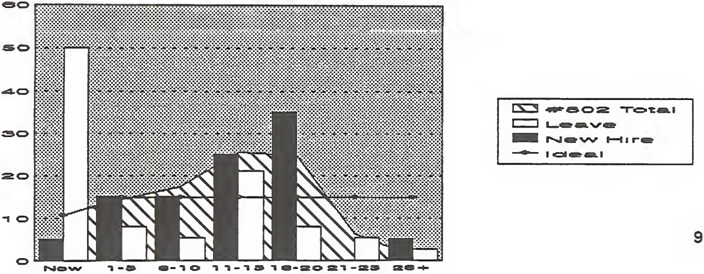
BLM had 290 engineering technicians at the time the data was drawn. This is the largest group of the eight technical occupations with more than 50 employees, with nearly one hundred more than the next largest group, forestry technicians.

The distribution for engineering technicians by organization is concentrated at the Resource Areas with 56% and the District Offices with 37%. There are only 5% at the State Offices. The distribution by States is markedly different than the pattern for all technical workers, with proportionally more in Oregon, New Mexico, and Wyoming, but substantially fewer in Alaska, Idaho and the Service Center, and none at the Fire Center.

There are 14 females and 32 minorities among the 290 engineering technicians, one of the lowest percentages of women of all technical occupations, with only electronic technicians showing a smaller average, although the minority average is only somewhat smaller than average. The education level of engineering technicians follows the general pattern for technicians but is slightly skewed toward better education, with slightly more associate and bachelors degrees, and somewhat fewer with no college. Two thirds of these technicians are GS 9, a clear central trend, and nearly twice the average are GS 11 while substantially fewer than average are GS 5-7.

The distribution of engineering technicians to retirement eligibility follows the familiar pattern of a bulge between two pinches, but the initial bulge is somewhat higher and the pinch of younger employees is dramatically lower. In other words, this is an older population that is not providing new entry level staff.

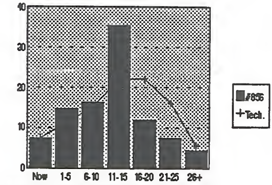
In the last three years, 20 engineering technicians have been hired and 38 left. The pattern of the new hires nearly mirrors the distribution to retirement eligibility, which means more hired near retirement and almost none hired more than 20 years from retirement. This suggests that the hiring is exacerbating the bulges in eligibility. 50% of the those separating were eligible to retire and the remaining separations are fairly evenly distributed among the other segments, except that there is a bulge in the group 11-15 years from retirement, indicating some mid-career turnover but an otherwise stable population.



GS-856, Electronic Technician

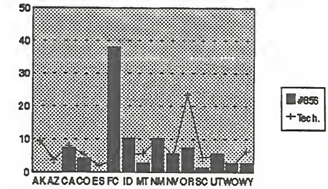
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



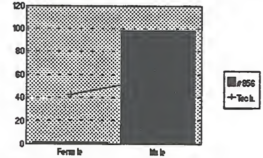
	Now	1-5	6-10	11-15	16-20	21-25	26+
#856	7.4	14.7	16.2	35.3	11.8	7.4	4.4
Tech.	7.5	11.3	15	22.1	22	16	5.6

#856 By States



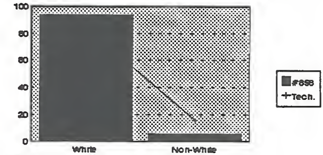
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#856	0	0	7.4	4.4	0	38.	10.2	2.9	10.	5.9	7.4	1.5	5.9	2.9	2.9
Tech.	9.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.	4.5	4.8	2	6.4

#856 By Sex



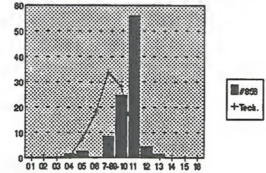
	Female	Male
#856	1.5	98.5
Tech.	42.4	57.6

#856 By Race



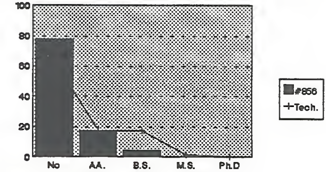
	White	Non-White
#856	94	6
Tech.	84.7	15.3

#856 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#856	0	0	0	1.5	2.9	0	8.8	25	55.	4.4	1.5	0	0	0
Tech.	0	0	0.3	0.9	8	18.	33.	28.	3.1	1.8	0.4	0	0	0

#856 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#856	77.9	17.6	4.4	0	0
Tech.	83.9	17.2	17.2	1.7	0.1

Electronic Technician

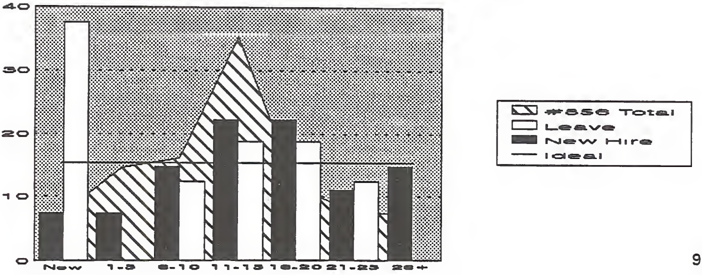
BLM had 68 electronic technicians at the time the data was drawn. This is the smallest of the technical occupations with more than 50 employees, with only one employee fewer than purchasing agents.

The distribution for electronic technicians by organization shows a heavy emphasis at the District Offices with 34% and State Offices with 24%, but as with purchasing agents, there are none at the Resource Areas. The State distribution varies radically from the pattern for all technical staff, with dramatically more proportionally at the Fire Center than for any state. There are somewhat more in Idaho, but far fewer at Oregon, Montana and Wyoming, and none at all in Alaska, Eastern States.

Out of 68 electronic technicians, there are only four minorities and one female, the lowest proportional averages of both women and minorities for all technical occupations. These technicians are somewhat less well educated than all other technical workers, with far fewer holding bachelors degrees and no higher degrees, and they are somewhat more likely to have no degree at all. The grade distribution for electronic technicians is substantially higher than average for technical staff, with more than half at GS 11, nearly 7 times the average. 9% of the electronic technicians are supervisors.

The distribution of electronic technicians by retirement eligibility follows the pattern for all technical staff -- a bulge between two pinches -- the bulge is concentrated at 11-15 years from eligibility, with only about half the average for staff younger than that.

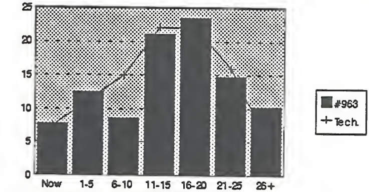
In the last three years, 27 electronic technicians were hired and 16 separated. The new hires are fairly evenly distributed by age. More than a third of those leaving were retirement eligible, the remainder also distributed fairly evenly by age. There may be need to hire more entry level, younger people.



GS-963, Legal Instrument Examiner

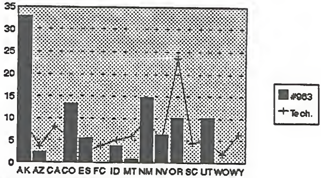
All Figures In Percent, Comparison To All Technicians

Years To Retire Eligible



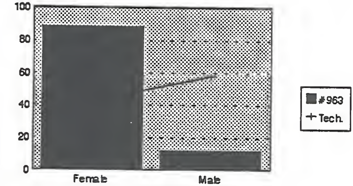
	Now	1-5	6-10	11-15	16-20	21-25	26+
#963	7.8	12.5	8.6	21.1	23.4	14.8	10.2
Tech.	7.5	11.3	15	22.1	22	16	5.6

#963 By States



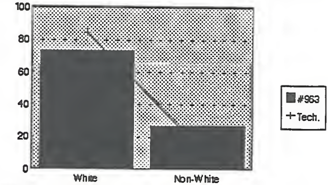
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#963	32.	2.3	0	13.	5.5	0	3.9	0.8	14.	6.3	10.	0	10.	0	0
Tech.	9.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.	4.5	4.8	2	6.4

#963 By Sex



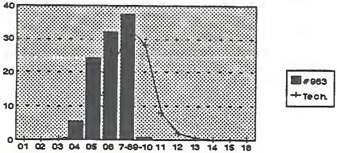
	Female	Male
#963	88.3	11.7
Tech.	42.4	57.6

#963 By Race



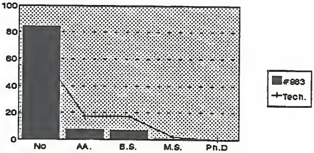
	White	Non-White
#963	73.4	26.6
Tech.	84.7	15.3

#963 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#963	0	0	0	5.5	24.	32	37.	0.8	0	0	0	0	0	0
Tech.	0	0	0.3	0.9	8	18.	33.	28.	8.1	1.8	0.4	0	0	0

#963 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#963	84.4	7.8	7	0.8	0
Tech.	83.9	17.2	17.2	1.7	0.1

Legal Instrument Examiner

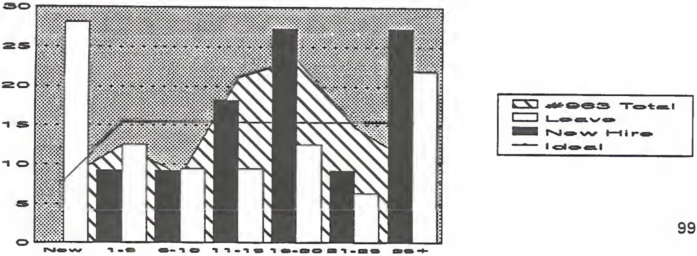
BLM had 128 legal instrument examiners at the time the data was drawn. This is the 5th largest of the eight technical occupations with more than 50 employees, slightly larger than personnel clerks, but smaller than range technicians. Thirty percent are classified in the PATCO clerical category, but are grouped together here to simplify analysis.

The distribution for legal instrument examiners by organization shows 12% at the Resource Areas, 20% at the District Offices and 35% at State Offices. The distribution by States varies substantially from the pattern for all technical workers, with three times the average in Alaska and substantially above average in Colorado, Utah, and New Mexico, but none in California, Wyoming, the Fire Center, Service Center or Washington Office.

There are 113 females and 34 minorities among the legal instrument examiners, more than twice as many women and minorities as for all technical staff. The grade distribution for the examiners is skewed substantially to the lower grades, with six times the average number of GS 4, three times the average of GS 5, and twice the average of GS 7, but none at GS 11 or higher. The educational level for legal instrument examiners is far below the average for the combined technical population, with half again the average with no college and less than half the average with an associate or bachelor degree. Only 5% are supervisors, one of the lowest percentages for all technical workers.

The distribution of legal instrument examiners to retirement eligibility is fairly close to average for technical staff, although there are only half as many 6-10 years from eligibility.

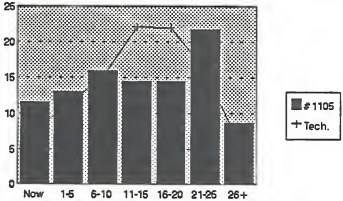
In the last three years, 11 legal instrument examiners were hired and 32 separated, bringing about statistically significant improvements in the education and number of women and minorities. About a quarter of those leaving were eligible to retire and another quarter were 26+ years from eligibility, with the remainder evenly distributed. Most of the new hires are at least 10 years from retirement eligibility, although nearly half are in the mid-career bulge.



GS-1105, Purchasing Agent

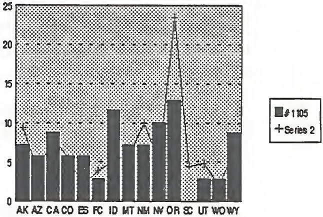
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



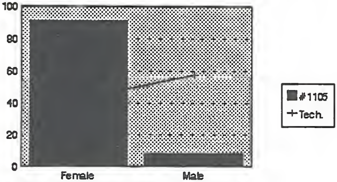
	Now	1-5	6-10	11-15	16-20	21-25	26+
#1105	11.6	13	15.9	14.5	14.5	21.7	8.7
Tech.	7.5	11.3	15	22.1	22	16	5.6

#1105 By States



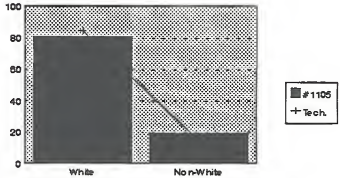
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#1105	7.2	5.8	8.7	5.8	5.8	2.9	11.6	7.2	7.2	10.1	13	0	2.9	2.9	8.7
Series 2	9.4	3.7	8.1	5.5	2.1	3.9	5.1	5.9	10	5	23.9	4.5	4.8	2	6.4

#1105 By Sex



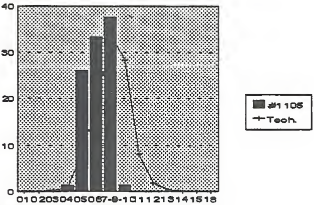
	Female	Male
#1105	91.3	8.7
Tech.	42.4	57.6

#1105 By Race



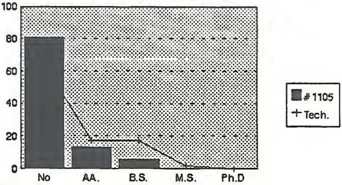
	White	Non-White
#1105	80.9	19.1
Tech.	84.7	15.3

#1105 By Grade



#1105	0	0	0	1.4	26	33	37	1.4	0	0	0	0	0	0
Tech.	0	0	0.3	0.9	8	18	33	28	8.1	1.6	0.4	0	0	0

#1105 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#1105	80.9	13.2	5.9	0	0
Tech.	63.9	17.2	17.2	1.7	0.1

Purchasing Agent

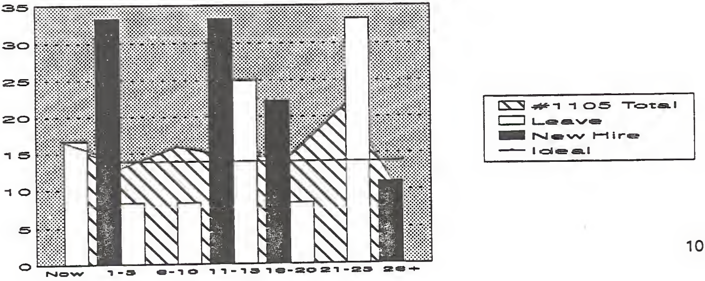
BLM had 69 purchasing agents at the time the data was drawn. This is the seventh largest of the technical occupations which have more than 50 employees, one individual larger than electronic technicians, but only about half the size of personnel clerks.

Organizationally, purchasing agents are concentrated in the District Offices with 64%. State Offices have only 23% and there are none in the Resource Areas. The distribution by States is fairly close to the pattern for all technical workers, although there are twice the average in Idaho but a little more than half the average in Oregon and none at the Service Center.

There were 63 females and 13 minorities out of the 69 purchasing agents, slightly fewer females and slightly more minorities than proportional in the total technical population. Purchasing agents have a lower educational level than average for technical staff, with half again more than average with no college while slightly less than average have an associate degree and only a third the average have a bachelors. Only 1% percent of the purchasing agents are supervisors, the lowest for all technical occupations.

The distribution of purchasing agents to retirement eligibility is nearly flat, with a bulge at 21-25 years from eligibility, making it one of the younger occupation.

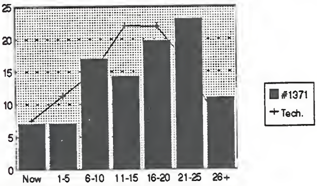
In the last three years, 9 purchasing agents have been hired and 12 have left bringing about a significant increase in the number of males. A third of the new hires are within 5 years of retirement and most of the remainder are at mid-career. Only 16% of those leaving were eligible to retire, while the largest number were 20 years from retirement.



GS-1371, Cartographic Technician

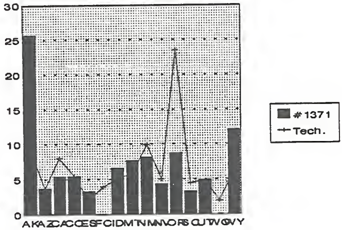
All Figures In Percent, Comparison To All Technicals

Years To Retire Eligible



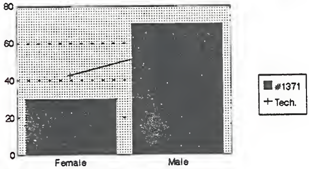
#1371	7.1	7.1	17	14.3	19.8	23.1	11
Tech.	7.5	11.3	15	22.1	22	16	5.6

#1371 By States



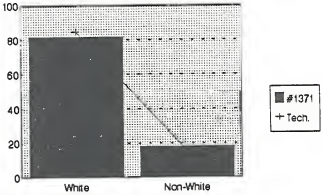
#1371	25	3.	5.	5.	3.	0	6.	7.	8.	4.	8.	3.	4.	0	12
Tech.	9.	3.	8.	5.	2.	3.	5.	5.	10	5	23	4.	4.	2	6.

#1371 By Sex



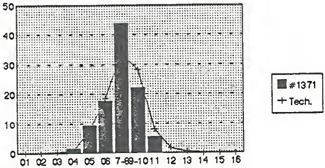
#1371	29.7	70.3
Tech.	42.4	57.6

#1371 By Race



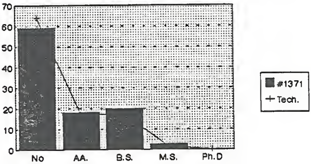
#1371	81.9	18.1
Tech.	84.7	15.3

#1371 By Grade



#1371	0	0	0	1.6	9.3	17.	43.	22	5.5	0	0	0	0	0
Tech.	0	0	0.3	0.9	8	18.	33.	28.	8.1	1.8	0.4	0	0	0

#1371 By Degree



#1371	59.1	18.2	19.9	2.8	0
Tech.	63.9	17.2	17.2	1.7	0.1

Cartographic Technician

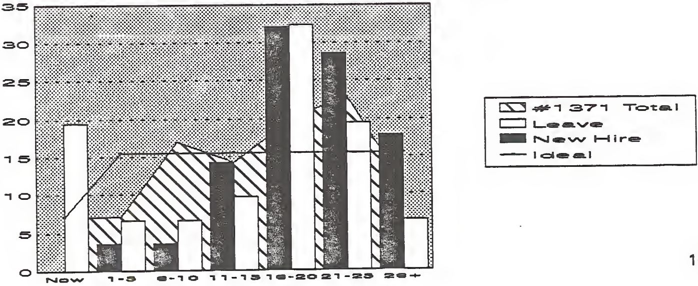
BLM had 182 cartographic technicians at the time the data was drawn. This is the third largest of the eight technical occupations with more than 50 employees, slightly larger than range technicians and slightly smaller than forestry technicians.

Organizationally, the cartographic technicians are concentrated at the State Offices with 56%, with less than 1% at the Resource Areas and 15% at the District Offices. The distribution by States shows a few dramatic differences than average for technical occupations, with substantially higher proportions in Alaska and Wyoming, markedly lower proportions in California and Oregon, and in the Fire Center and Washington Office which have none.

There are 54 females and 33 minorities among the 182 cartographic technicians, somewhat fewer women but slightly more minorities than proportionally average in other technical occupations. These technicians have a slightly higher educational level than other technical occupations, with a few more associate, bachelor and masters degrees, but no PhDs. They are slightly less likely to have no degree. The grade distribution for cartographic technicians follows the pattern for all technical workers, but is slightly skewed toward lower grades because of the peak at GS 7-8. 9% of purchasing agents who are supervisors, about the average for all technical occupations.

The distribution of cartographic technicians by retirement eligibility is skewed toward a younger population, with a reasonably flat distribution between 6-25 years from eligibility.

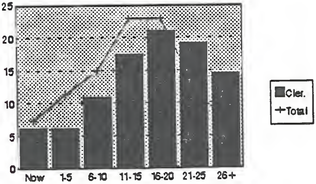
In the last three years, 28 cartographic technicians have been hired and 31 have left. Nearly 20% of those leaving were eligible to retire, but more than half were 16 or more years from retirement. Most of the new hires were at least 16 years from retirement.



PATCO CLERICALS

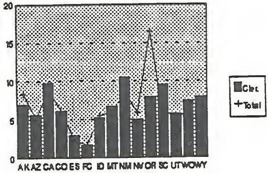
All Figures In Percent, Comparison To All Employees

Years To Retire Eligible



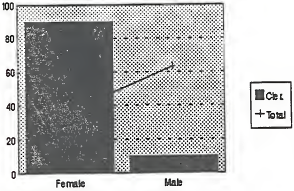
	Now	1-5	6-10	11-15	16-20	21-25	26+
Cler.	6.2	6.2	11	17.4	21.1	19.1	14.6
Total	7.3	11.4	15	22.9	22.9	12.8	6.2

By States



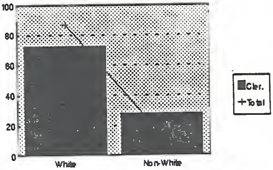
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
Cler.	7	5.7	9.8	6.2	3	1.7	5.3	6.8	10.	5.1	8	9.8	5.8	7.5	8
Total	8.4	5.2	9	6.2	2.4	1.8	5.5	6	8.6	5.9	15.4	6	5.7	5.7	7.4

By Sex



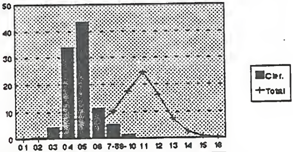
	Female	Male
Cler.	89.7	10.3
Total	36.7	63.3

By Race



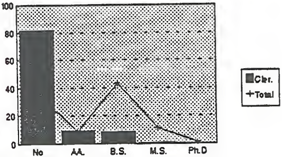
	White	Non-White
Cler.	72.4	27.8
Total	87	13

By Grade



	01	02	03	04	05	06	7-8	8-10	11	12	13	14	15	16
Cler.	0.1	0.3	4.4	34.	43.3	11.	5.2	1.5	0	0	0	0	0	0
Total	0	0.1	0.8	5.6	8.8	5.2	10.	17.5	24.5	16.2	7.5	2.4	0.5	0.3

By Degree



	No	A.A.	B.S.	M.S.	Ph.D
Cler.	81.5	9.5	8.5	0.5	0.1
Total	36.2	8.8	42.9	11.1	1

X. CLERICAL OCCUPATIONS

Overview

BLM had 1250 individuals in the PATCO category of clerical at the time the data was drawn. This total is the smallest of the PATCO categories examined here, about 500 workers less than the technical occupations, 1600 smaller than professional and 1700 smaller than administrative. A total of five clerical occupations have more than 50 members, the threshold for detailed occupational analysis in this report. Numerous smaller groups such as information/reception, clerk steno, management clerk, EEO assistance, financial clerk, budget clerk, and others have not been analyzed in detail but have been included in the totals.

The organizational distribution of clericals follows the general distribution of all BLM workers, with the exception that there are only half the average in Oregon. In round numbers, there are 200 at the Resource Areas, 300 at the District Offices and 400 at State Offices and about 100 each at the Washington Office and Service Center.

Of the 1250 clerical workers, 1121 are female and 345 are minorities, a substantially higher proportion of women and about as many minorities as in the other PATCO categories. The education of clerical workers is significantly lower than other PATCO categories, with very few four year degrees and virtually no higher degrees; they are twice as likely as other PATCO categories to have no degree. Those that have four year degrees are fairly evenly distributed throughout the five clerical occupations. The grades of clericals are heavily concentrated at the GS 4-5 levels, with only a few at the GS 10 level, and none above that. Only 2% of all clericals are supervisors.

The distribution by retirement eligibility diverges significantly from the other PATCO categories, in that the population is significantly younger and the bulge is fairly evenly distributed from 11-30 years from eligibility.

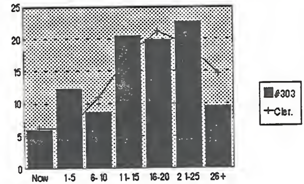
In the last three years, 465 new clerical workers have been hired and 405 have left. Almost 80% of the new hires were at least 10 years from retirement eligibility. While this is technically in the bulge years, the bulge is so broad that this would not seem to be a problem. 13% of those leaving were retirement eligible, most of the remainder were more than 10 years from eligibility and approximately parallel to the hiring pattern at each age group.

Most of the occupations have a fairly limited range of grades, but more career development is available by changing occupations than in the Professional category. This is not to say that career development is easy or routine, only that the analytic tools of this report may not be sufficient to the complexity of clerical career paths.

GS-303, Misc. Clerk and Assistant

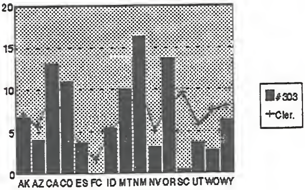
All Figures In Percent, Comparison To All Clericals

Years To Retire Eligible



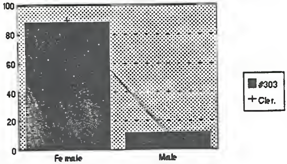
	Now	1-5	6-10	11-15	16-20	21-25	26+
#303	5.9	12.2	8.6	20.4	19.9	22.6	9.5
Cler.	6.2	6.2	11	17.4	21.1	19.1	14.6

#303 By States



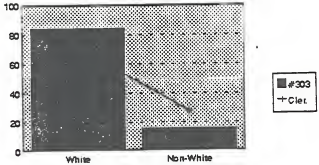
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#303	6.8	4.1	13.1	10.	3.6	0	5.4	10	16.8	2	13.0	0.5	3.6	2.7	6.3
Cler.	7	5.7	9.8	6.2	3	1.7	5.3	6.8	10.	5.1	8	9.6	5.8	7.5	8

#303 By Sex



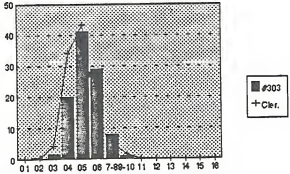
	Female	Male
#303	88.2	11.8
Cler.	89.7	10.3

#303 By Race



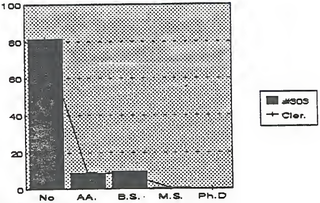
	White	Non-White
#303	84.6	15.4
Cler.	72.4	27.6

#303 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#303	0	0	1.4	19.9	41.2	29	7.8	0.9	0	0	0	0	0	0
Cler.	0.1	0.3	4.4	34.	43.3	11.	5.2	1.5	0	0	0	0	0	0

#303 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#303	81.3	8.7	9.6	0.5	0
Cler.	81.5	9.5	8.5	0.5	0.1

Miscellaneous Clerk and Assistant

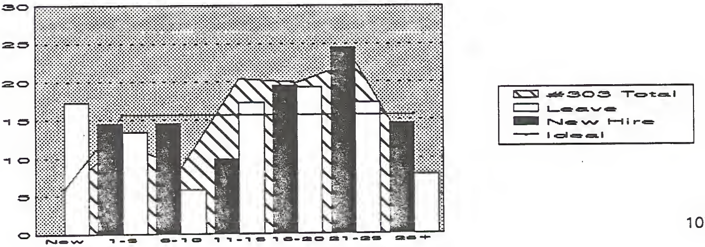
BLM had 221 miscellaneous clerks and assistants at the time the data was drawn. This is the second largest of the five clerical staff occupations with more than 50 employees, about two thirds the size of secretary, and somewhat larger than legal clerks and technicians. 38% of the miscellaneous clerks and assistants are categorized as technical not clerical, but they are grouped with the clerical to simplify analysis.

The organizational distribution of the miscellaneous clerks and assistants in heavily concentrated at the Resources Areas with 51%. District Offices have 24% and 15% are at State Offices. There are 3% at the Washington Office, and less than 1% at the Service Center. The distribution by State Offices varies significantly from the general pattern for all clerical staff. There are much higher percentages in Colorado, New Mexico, Oregon, California and Montana. There are substantially lower percentages in Arizona, Nevada, Utah and Wyoming and in the Service Center. There are none at the Fire Center.

There are 195 females and 34 minorities, about the same percentage of women as for all clerical, but substantially fewer minorities proportionally than for all clerical staff. Miscellaneous clerks and assistants are about as well educated as the overall clerical staff. The grade distribution of miscellaneous clerks and assistants follows the general pattern for all clerical staff but is skewed about one grade higher. Twelve percent are supervisors, one of the highest percentages for all clerical staff, where the percentages are typically low.

The distribution to retirement eligibility is roughly the same as the general pattern for all clerical workers, but more are within 5 years of retirement and fewer are 26 years from retirement.

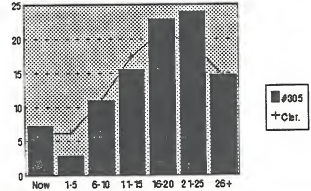
In the last three years, 41 miscellaneous clerks and assistants were hired and 52 left. The new hires and those leaving are fairly evenly distributed by retirement eligibility. Seventeen percent of all those separating were eligible to retire.



GS-305, Mail and File Clerks

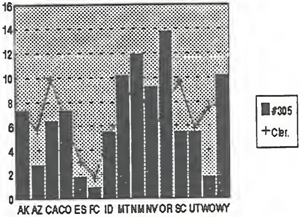
All Figures In Percent, Comparison To All Clericals

Years To Retire Eligible



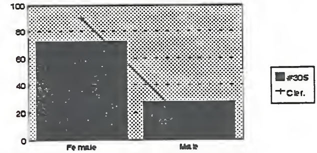
	Now	1-5	6-10	11-15	16-20	21-25	26+
#305	7.3	2.8	11	15.6	22.9	23.9	14.7
Cler.	6.2	6.2	11	17.4	21.1	19.1	14.6

#305 By States



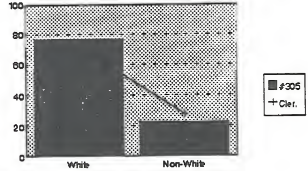
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#305	7.3	2.8	6.4	7.3	1.8	0.9	5.5	10.	11.	9.2	13	5.5	5.5	1.8	10.
Cler.	7	5.7	9.8	6.2	3	1.7	5.3	6.8	10.	5.1	8	9.6	5.8	7.5	8

#305 By Sex



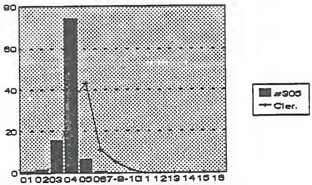
	Female	Male
#305	72.5	27.5
Cler.	89.7	10.3

#305 By Race



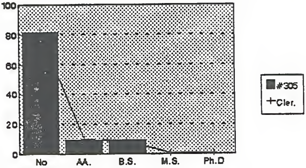
	White	Non-White
#305	77.1	22.9
Cler.	72.4	27.6

#305 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#305	0.8	1.8	15	74	6.4	0.8	0	0	0	0	0	0	0	0
Cler.	0.1	0.3	4.4	34	43	11	5.2	1.3	0	0	0	0	0	0

#305 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#305	81.7	9.2	9.2	0	0
Cler.	81.5	9.5	8.5	0.5	0.1

Mail and File Clerks

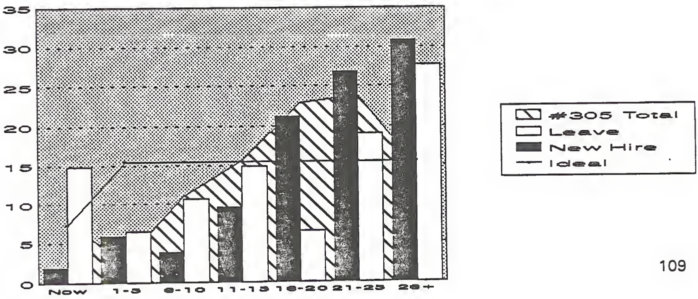
BLM had 109 mail and file clerks at the time the data was drawn. This is the smallest of the clerical occupations with more than 50 employees.

While there are very few mail and file clerks in the Resource Areas, they are heavily concentrated at the District Offices with 55% and State Offices with 26%. The Service Centers have 6% and the Washington Office only 2%. The distribution by States varies significantly from the average for clerical positions, with substantially larger proportional averages in Montana, New Mexico, Oregon and Wyoming and lower proportional averages in Arizona, California, the Eastern States, the Service Center, the Fire Center and Washington Office.

There 79 females and 25 minorities among the 109 mail and file clerks, proportionally somewhat fewer women and minorities than for all clerical staff. Mail and file clerks are at about the same educational level as all clerical staff. The grade distribution is concentrated at the GS 4 level, with substantially fewer at the higher grades than other clerical occupations. None is a supervisor.

The distribution of retirement eligibility for mail and file clerks follows the clerical average closely, although there are slightly fewer reaching eligibility in the next 5 years and slightly more in 21-25 years, suggesting a slightly younger population than average.

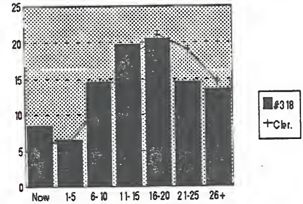
In the last three years, 52 mail and file clerks have been hired and 47 left. Almost 80% of the new hires have been at lest 15 years from retirement eligibility, with a trend toward hiring younger employees. 15% of those leaving were retirement eligible, but almost 60% were more than 20 years from eligibility.



GS-318, Secretary

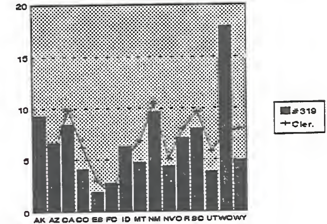
All Figures In Percent, Comparison To All Clericals

Years To Retire Eligible



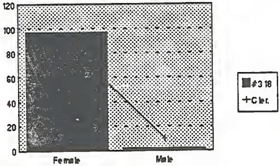
	Now	1-5	6-10	11-15	16-20	21-25	26+
#318	8.5	6.6	14.6	19.8	20.6	14.6	13.5
Cler.	6.2	6.2	11	17.4	21.1	19.1	14.6

#318 By States



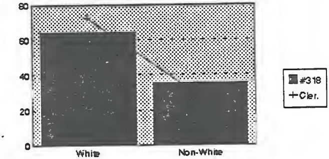
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#319	9.3	6.6	8.5	4.1	1.8	2.7	6.3	4.7	9.6	4.4	7.1	8	3.9	17	4.9
Cler.	7	5.7	9.9	3.2	3	1.7	5.3	6.9	10	5.1	8	9.6	5.8	7.3	8

#318 By Sex



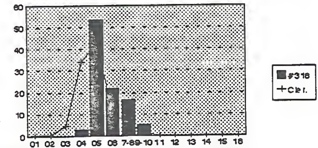
	Female	Male
#318	97.5	2.5
Cler.	89.7	10.3

#318 By Race



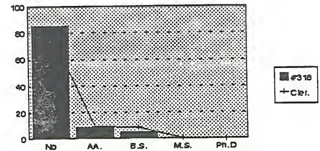
	White	Non-White
#318	64.6	35.4
Cler.	72.4	27.6

#318 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#318	0	0	0	2.7	53.6	22	16.7	4.9	0	0	0	0	0	0
Cler.	0.1	0.3	4.4	34.1	43.3	11.	5.2	1.5	0	0	0	0	0	0

#318 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#318	84.6	9.1	5.5	0.8	0
Cler.	81.5	9.5	8.5	0.5	0.1

Secretary

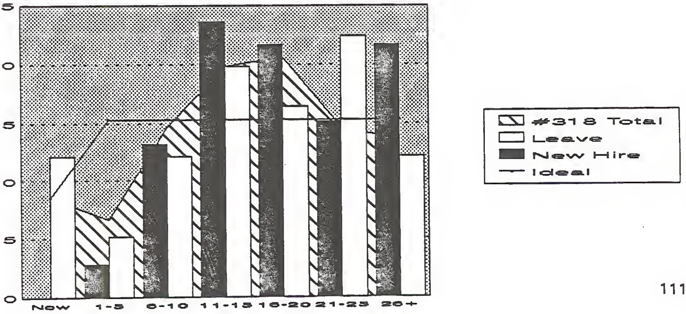
BLM had 364 secretaries at the time the data was drawn. This is the largest of the five clerical occupations with more than 50 employees.

The organizational distribution for secretaries generally follows the distribution of all clerical workers, except there are more than double the average number in the Washington Office.

There are 355 females and 129 minorities among the 364 secretaries, the same proportional average of women for all clerical staff, but markedly fewer minorities. The educational level for these secretaries is not much different than for all clerical staff. The grade distribution is substantially skewed to the higher clerical grades, with the greatest numbers at the GS 5 level but at least double the average for each of the higher grades while hardly any at lower grades. Less than 1% of the secretaries are supervisors.

The distribution to retirement eligibility is roughly the same as for all clerical staff but slightly skewed to an older population.

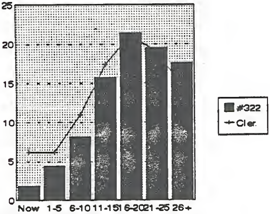
In the last three years, 129 secretaries have been hired and 116 have left. About 85% of the new hires have been at least 10 years from retirement eligibility.



GS-322, Clerk Typist

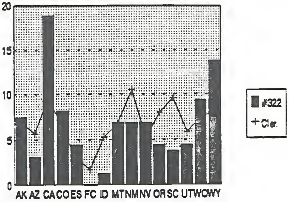
All Figures In Percent, Comparison To All Clericals

Years To Retire Eligible



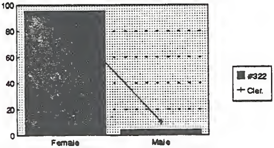
	Now	1-5	6-10	11-15	16-20	21-25	26+
#322	1.9	4.4	8.2	15.7	21.4	19.5	17.6
Cler.	6.2	6.2	11	17.4	21.1	19.1	14.6

#322 By States



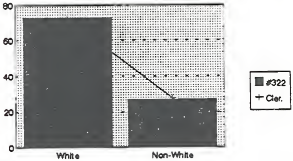
	AK	AZ	CA	CO	ES	FC	ID	MT	NM	NV	OR	SC	UT	WO	WY
#322	7.5	3.1	18.	8.2	4.4	0	1.3	6.9	6.9	6.9	4.4	3.8	4.4	9.4	13.
Cler.	7	5.7	9.8	6.2	3	1.7	5.3	6.8	10.	5.1	8	9.6	5.8	7.5	8

#322 By Sex



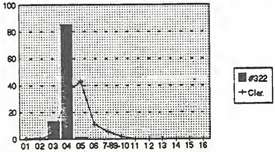
	Female	Male
#322	95.6	4.4
Cler.	89.7	10.3

#322 By Race



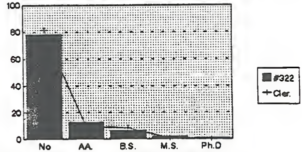
	White	Non-White
#322	73	27
Cler.	72.4	27.6

#322 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#322	0	0.6	13.	84.	1.3	0	0	0	0	0	0	0	0	0
Cler	0.1	0.3	4.4	34	43	11	5.2	1.5	0	0	0	0	0	0

#322 By Degree



	No	AA	B.S.	M.S.	Ph.D
#322	78	12.6	6.9	1.9	0.6
Cler.	81.5	9.5	8.5	0.5	0.1

Clerk Typist

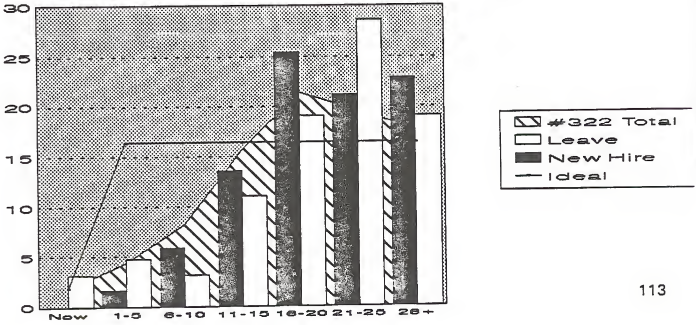
BLM had 159 clerk typists at the time the data was drawn. This is the 4th largest group of the five clerical occupations with more than 50 employees, somewhat larger than mail and file clerks, and slightly smaller than the legal clerk and technicians.

The organizational distribution for clerk typists in primarily at the Resource Areas (31%) and District Offices (36%) while the State Offices have 16%. There are 9% at the Washington Office and 4% at the Service Center. The distribution by State Office varies substantially from the general pattern for all clerical staff. There are twice the average number in California and nearly that proportion in Wyoming, but notably lower percentages in Arizona, Idaho, New Mexico, Oregon, Utah, and the Service Center. There are none at the Fire Center.

There are 152 females and 43 minorities among the 159 clerk typists, a somewhat higher proportional average for females and about the same proportion of minorities as for all clerical occupations. Clerk typists have the same educational level as the general clerical population. The grade distribution for clerk typists is substantially skewed toward lower grades, with 85% at GS 4 and hardly any above that level. Less than 1% of clerk typists are supervisors.

The distribution to retirement eligibility follows the pattern for all clerical staff, somewhat skewed to a younger population.

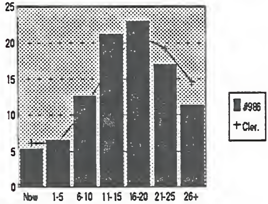
In the last three years, 118 clerk typists have been hired and 63 left. The distribution of hiring and separation closely follows the distribution by age, which means most of the activity is at least 15 years from retirement eligibility.



GS-986, Legal Clerk and Technician

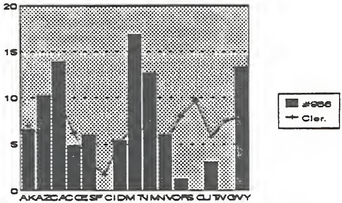
All Figures In Percent, Comparison To All Clericals

Years To Retire Eligible



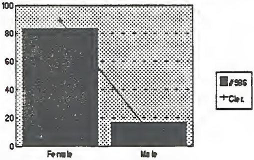
	Now	1-5	6-10	11-15	16-20	21-25	26+
#986	5.4	6.6	12.7	21.1	22.9	16.9	11.4
Cler.	6.2	6.2	11	17.4	21.1	19.1	14.6

#986 By States



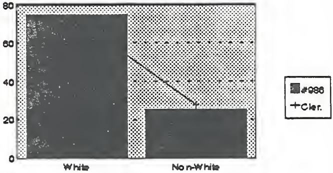
#986	6.6	10	13	4.8	6	0	5.4	16	12	6	1.2	0	3	0	13
Cler.	7	5.	9.8	8.	2.3	1.	5.3	8.8	5.	1	8	9.6	5.6	7.5	8

#986 By Sex



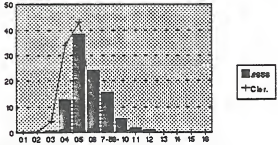
	Female	Male
#986	83.7	16.3
Cler.	89.7	10.3

#986 By Race



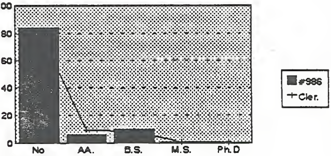
	White	Non-White
#986	74.7	25.3
Cler.	72.4	27.6

#986 By Grade



	01	02	03	04	05	06	7-8	9-10	11	12	13	14	15	16
#986	0	0	0.8	12.	38.	24.	15.	5.4	1.5	1.2	0	0	0	0
Cler.	0.1	0.3	4.4	34.	43.3	11.	5.2	1.5	0	0	0	0	0	0

986 By Degree



	No	AA.	B.S.	M.S.	Ph.D
#986	84	5.5	9.8	0.6	0
Cler.	81.5	9.5	8.5	0.5	0.1

Legal Clerks and Technicians

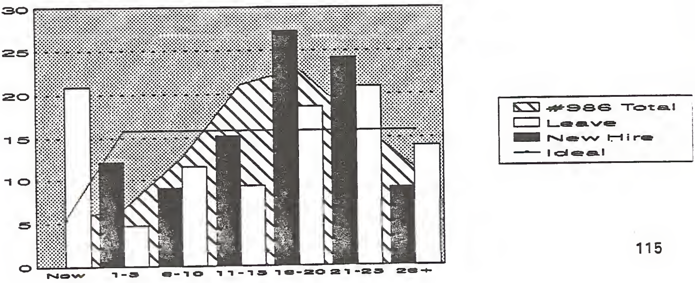
BLM had 166 legal clerks and technicians at the time the data was drawn. This is the third largest of the five clerical occupations with more than 50 employees, slightly larger than clerk typists, but smaller than miscellaneous clerks and assistants. 24% of this occupation is categorized as technical not clerical, but they are grouped together here to simplify analysis.

The organizational distribution for legal clerks and technicians is primarily concentrated at the State Offices with only a few at the Resource Areas and District Offices. The distribution by States is substantially different from the general distribution for all clerical occupations, with significantly higher percentages in Arizona, California, Eastern States, Montana, New Mexico and Wyoming. There are also notably lower percentages in Oregon and Utah; and none at the Fire Center, Service Center and Washington Offices.

There are 139 females and 42 minorities among the 166 legal clerks and technicians, somewhat fewer women and minorities proportionally than for the entire clerical population. Legal clerks and technicians have about the same educational level as average for all clerical occupation. The grade distribution follows the same general pattern for all clerical staff, slightly skewed to higher grades with a few as high as GS 12, far higher than any other clerical occupation. Twelve percent of legal clerks and technicians are supervisors.

The distribution by retirement eligibility follows the general pattern for all clerical occupations, slightly skewed to the mid-career years which gives a slightly older average.

In the last three years, 33 legal clerks and technicians have been hired and 43 left. The distribution of new hires is proportionate to the total distribution by age. 21% of those leaving were retirement eligible, the remainder were skewed toward the younger population.



XI. SUMMARY SUGGESTIONS

A. Overview

As the goals on the first page of this report indicate, this study was a survey to establish baseline data rather than an evaluation to recommend solutions to an identified problem. Since the study was originally chartered as a program evaluation, this report may be seen as the scoping study prior to the actual evaluation. A more appropriate perspective may be to treat the executive summary (section II) as suggestions for issue papers, sections III through X as baseline data, this section as the initial staff work for the issue papers in section II, section XII as background and context for the data and section XIII as the audit trail on how the data was produced and as a guide for future analysis.

The major concerns arising from this scoping study are:

organizational responsibility,
management control of recruitment and selection, and
appropriate standards.

The following are some suggestions that could prove helpful in making full use of the potential from this effort.

B. Departmental Assistance

So much work is required to get the basic data for workforce analysis into a shape from which reasonable analysis may be undertaken that it is wasteful (and improbable) to expect each bureau to undertake it on their own. It would be much more efficient for the Department to develop and provide to the bureaus the basic working definitions and analysis formats, the base data from PayPers, and a working file of the base data small enough that it could be downloaded to a PC for in-depth analysis and customized reports. Bureaus could then work with the data in their own way and in line with their own priorities.

With better analysis and coordination, the level of resources currently expended on demographic work in EEO and personnel would be sufficient to provide an excellent foundation for the bureaus.

C. Bureau Human Resource Management Office

The demographic issues identified in this study will require long term systematic analysis to address. There does not currently appear to be clear delegations of authority or responsibilities for workforce analysis. The Departmental goals are silent on this topic. But it seems reasonable that responsibility would fall with the new HRM Offices to shape the approach, maintain the follow-up, and provide technical personnel and EEO support to the managers in decision-making.

Workforce analysis requires cooperation between Personnel and EEO to produce reports that meet managers needs. There are many advantages to starting the HRM office in an area with a strong factual base.

D. Bureau Assistant Directors

The decisions about the ideal workforce by occupation should be made at a level that can balance demands by competing occupations and locations, and ensure that the ideals are congruent with long term plans and budget for the organization. In short, the Assistant Directors should be responsible for setting workforce targets and selecting intervention strategies, based on strong input from the States and technical advice from the HRM office.

A plan for each occupation should specify the long term needs for the approximate number of staff, whether that number is going up or down, any anticipated short term fluctuations, the appropriate grade distribution, and the appropriate distribution by relevant population characteristics such as experience level, education, sex, race, retirement eligibility, etc. The planning should lead to developing an ideal distribution for each occupation. Once the target is developed, the current demographics can be compared to the ideal workforce, and appropriate strategies selected for investing the vacancies to bring the workforce into congruence with the ideal.

On the face of it BLM senior managers would seem well equipped for these types of issues because so many are trained in renewable resources. The workforce management techniques have many parallels with forest management, herd management, and other resource issues.

E. Analytic Support

In-depth analysis of huge personnel data bases is not easily done by a part time committee or rotated through a series of occasional workers. It requires large blocks of dedicated time of an individual with specific training, aptitudes, and interests. The analyst develops the measures of the data base and packages the information so that the trends can be easily seen.

The skills required include a strong analytic ability, a proven ability to work with large data bases and statistics, and either advanced computer skills or a close working relationship with other analysts skilled in the use of mainframe computers. The analyst must have the freedom to devote extended periods of time to each issue. While a general understanding of personnel is required, a management analyst may be better suited to the work than a personnel analyst. In short, the selection of the workforce analyst should be driven more by personal skills and interests than by organizational placement.

F. Coordination of Recruitment and Selection

BLM has given substantial attention to recruiting and selecting women and minorities, and has made significant improvements in some occupations. But the overall numbers showed no statistically significant improvement in the three years reviewed in the report, a surprise to many people. There could be many explanations for the lack of significant change, and a careful analysis is called for. But the general conclusion is that an ongoing monitoring system should be developed which compares not only the selections but the retirements and separations so that the net change can be assessed. As mentioned above, this would reasonably be the responsibility of the HRM office.

G. Appropriate Standards

This report has used averages by PATCO categories or averages of the total BLM workforce as a basis of comparison for most of the charts. While this is helpful to see how a given occupation or category compares to the others, it does not provide any insight into how that particular workforce compares to the non-BLM labor pool.

While it should be obvious that an external standard is needed, occupations in BLM are far from the Federal government mainstream, with the result that the realistic recruitment pools may be quite different from average. Thus caution must be used in selecting an appropriate objective standard.

These issues are not new to BLM. What may be new is that the EEOC now provides data by PATCO, and private firms now exist near the BLM Washington Office which compute statistically sound comparison standards by occupation and location. This provides an alternative to the time consuming and contentious process of computing appropriate standards within BLM. The 1990 census data will soon be available, so this would seem an appropriate time to start the arrangements to get standards specifically appropriate to BLM.

XII. BACKGROUND

A. Demographics Study Required

A demographics analysis of each agency is required by the Equal Employment Opportunity Commission. The most recent guidance is published in Section 13, Part 2 of Guidance in Federal Affirmative Employment Planning, published January 21, 1988, the sample plan of Management Directive 714. Age, race, and sex are required areas of study.

This report is not designed to fulfill EEOC requirements. There is no discussion of age, for example, and the various minorities have been grouped together to give a big picture rather than a detailed picture. This report is intended to provide baseline data and an overview to assist, among others, the appropriate office in starting the required EEOC analysis.

B. CSC Attrition Study

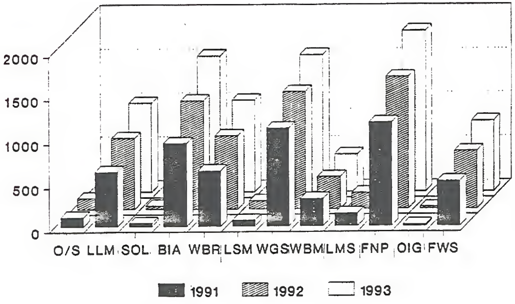
In 1977 the Bureau of Policy and Standards of the Civil Service Commission published a book Planning Your Staff, which showed that attrition normally follows a log probability. Greatly simplified, this means that at least half the attrition occurs during the first three years of a career, and the remaining half is spread at an even, declining rate over the remaining 27 years to retirement eligibility. If no historical data is available for a specific occupation, this provides a basis for estimating attrition to arrive at a reasonable estimate of the turnover rate.

The high attrition rate in the first three years means that to keep an even distribution of workers immediately past the entry level, twice the number of entry level workers will have to be recruited. Since the same vacancies simply get recycled in the rapid turnover in the first three years, this has no impact on the overall distribution of retirement eligibility, but it has a severe impact on the level of effort which must be devoted to recruitment.

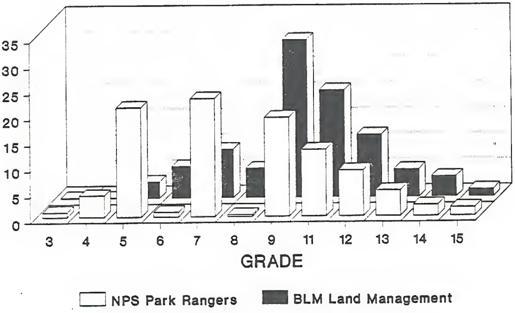
C. Civil Service 2000

Civil Service 2000, a study published by the United State Office of Personnel Management in 1988, provided an analysis of Federal workforce and current census data, and concluded that the Federal government will soon be drawing from a labor pool vastly different than in past years. It recommended improvements in the strategies for attracting, hiring, training, motivating and keeping talented people.

Projection of Retirement Eligible
As of September 30, 1990



Grade Comparison between Park Rangers and BLM Land Management Personnel



D. Departmental Demographic Studies

The Department of the Interior's Personnel Management Bulletin No. 84-47 reported the results of a demographics study they conducted of administrative occupations in Interior. The bulletin identified an upcoming bulge in retirement of administrative occupations across all the bureaus. The bulletin recommended that Bureaus take the initiative to do their own detailed studies.

The same office later issued the chart on the opposite page, which shows the retirement eligibility by bureau for 1991, 1992, and 1993. It is obvious from the chart that BLM and the other major bureaus will have large numbers of employees reaching retirement eligibility in the near term. And in each case the trend is increasing.

While accurately describing the impending retirement eligibility, an analysis of retirement eligibility only 3 years deep provides no base line for comparison. This means that the 3 years can be compared across bureaus but not with historical trends to see if the three years shown are larger or smaller than average. Thus it is not clear whether the impact of this retirement will be a change from the trend over the last decade. It is clear, however, that it will obviously be a challenge to fill the large number of vacancies; and an opportunity to shape the workforce by strategically managing how those vacancies are filled.

The Departmental personnel office now issues an annual review of Human Resources Management. As of this writing, the most recently published review covers FY 1990. In the section on retirement, that report on page 109 says:

> "Numerous studies by Bureaus and the Department indicate that the projections regarding the increasing age of the Federal workforce during the 1990's are currently a reality in the Department. More and more of our most experienced employees will be retiring. For example, 50% of the Senior Executive Service members will be eligible to retire by the end of 1994. Over 60% of the workforce in occupations such as personnel, budget, and contracting will be eligible to retire by the year 2000 when 37.9% of the current DOI workforce will be eligible to retire."

The approach to analysis quoted above is much more useful than the first two. Unfortunately, the report does not provide similar analysis for any other occupation group, details about any specific occupation, or a breakout by bureau.

A subgroup of a recent departmental human resource workgroup proposed that a demographics analysis by sex, race, and age be conducted of the 5 major occupations of each bureau. This approach is very helpful, for example, in the National Park Service where a few occupations account for such a large portion of the workforce. But in BLM no occupation accounts for as much as 5% of the workforce, so data on the largest 5 would not cover so much as 25% of the workforce. A more helpful approach would be to provide data on as many occupations as necessary to cover a specified percent of the workforce, at least 75%.

A further problem in using the Departmental data for workforce analysis is that it provides little information on turnover other than retirement. But retirement only accounts for only about 25% of the turnover.

The conclusion is that the Departmental analysis identifies the issue, but is not currently sufficient for making basic workforce analysis decisions in BLM. As a result, an analysis responsive to BLM's population is needed to see the trends in retirement eligibility necessary for workforce planning.

The EEO monitoring & analysis system (EEO MAS) was developed by a contractor to do demographic work with PayPers data, and is already available to 3 bureaus. Data has been loaded from 2 specific dates, and testing should soon be underway. If it works, this software has the potential to greatly simplify demographic analysis. Unfortunately, there is currently no provision to include data on years to retirement eligibility - a pivotal data element.

The general conclusion appears to be that there is on-going department-wide interest and effort in demographic analysis. But as of this writing there has not been a sufficiently coordinated analytic effort to systematically define the needs and provide all the necessary data and report formats. Other task forces are at work, so progress in the near term is possible.

The analytic challenge is to balance the needed level of detail needed for comprehensiveness with the graphics and higher level summaries needed to make it understandable, and to package this in a format simple enough that it will be widely used.

It is also important to ensure that the new personnel system being developed for Interior, the Federal Personnel and Payroll System (FPPS, pronounced fips), is designed to facilitate analysis and to automatically produce the reports necessary for workforce analysis. The system is expected no earlier than 1993, so there is time for the Department to include such specifications.

E. National Park Service Studies

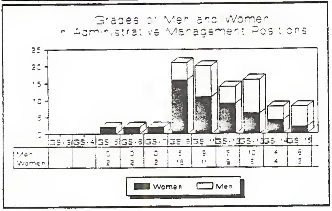
The Park Service leads the Department in workforce analysis. They started with the same general approach as used in this report. A sample of their grade level analysis is shown at the bottom of the previous page. Based on this information, they systematically reshaped the duties of some occupations to provide a more favorable grade structure.

Work Force Profile of 301 General Administration Occupation

General Employment Statistics:

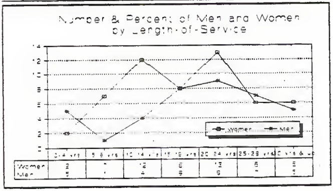
Current Population:	93 Employees.
Percentage: Men 41.9%	Women 58.10%
Annual growth rate (1986-90):	2.89%
Percentage of employees eligible to retire in next five years:	32.6%
Total employees hired in 1990:	16
From outside of the Service:	5
From inside the Service:	11
Number of men hired:	6
Number of Women hired:	10
Number of Promotions in 1990:	15
Percent given to women:	60.0%
Percent given to men:	40.0%

Grade Distribution



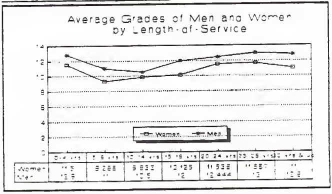
This occupation enjoys a favorable average grade, with the majority of employees at grades above GS-9. The favorable average grade and the few numbers of employees at the lower grade levels portends good advancement opportunities. Women are well represented in grades GS-12 and below with lessening representation at grade GS-13 and higher.

Past Hiring Practices and Future Representational Projections



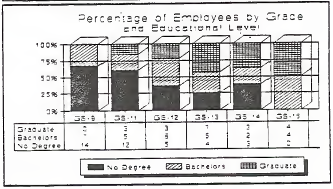
Hiring between men and women has been very mixed over the past 30 years, with men dominating in some time periods and women dominating in other time frames. Current patterns are for both fewer women and men being hired into the occupation over the past 15 or so years. Women should continue to be in the majority within the occupation over the next several years unless hiring patterns again change.

Average Grades of Men and Women by Length-of-Service:



Differences in the average grades of men and women exist at most length-of-service categories, with the average grades of men being between 1 1/2 to two grades higher than their female colleagues with comparable years-of-service.

Education Levels of Employees



About 55% of all employees in these occupations have a college degree with the academic concentrations varying widely. Some relationship exists between educational level and grade level, particularly for employees at grades GS-12 and above.

A sample of their work force profiles (301 general administration occupation) is shown on the previous page. This is similar to the BLM occupation summaries presented in earlier chapters of this report, but goes beyond the BLM analysis with more emphasis on differences between men and women in grade distribution, hiring practices, and length of service in relation to grade.

Once the foundation data was established, their detailed analysis delved into the following areas:

Attrition rate, and what influences it.

Recruitment, particularly the demographics of the recruitment pool, difficulties faced by specific parks, and the measures of applicant quality.

Workforce comparisons by sex and race, based on PATCO data from EEOC.

Career development barriers.

Position management with regard to minorities and females.

Grade structure analysis, with position management to solve problems (sample and discussion are above).

Growth or shrinkage in occupations.

Educational background related to occupations.

On the face of it, these would appear to be profitable areas for the next phase of analysis in BLM.

Based on the above analysis, the Park Service has identified occupations where the projected retirement rate in the next few years will be so great that the pool of qualified candidates within the organization will not be large enough to fill all the projected vacancies. In response, they have started a program to identify or recruit upwardly mobile candidates and establish a "fast track" training and promotion program for them. In this way they will have a suitable pool of prepared candidates when needed.

F. BLM State Studies

Numerous BLM program and State offices undertook their own demographic studies, and there was a danger of confusion and duplication if all offices conducted their own studies starting with different assumptions.

G. Department of Labor

The Department of Labor does not use PayPers but has about the same difficulties with their personnel systems that DOI has. They have developed a simple, efficient solution. They identified the 50 variables needed for workforce analysis, agreed on recoding to produce working definitions and exceptionally clear documentation, and have assigned one full time analyst to use a commercial computer system to quickly generate consistent reports as needed. This provides all the reports for all their bureaus, and the data and quality control are always consistent. This approach deserves review in DOI.

H. Work Plan Approval

BLM's Assistant Director, Management Services, requested that the Division of Program Evaluation (WO-860) undertake a Special Evaluation of BLM Demographics. A first cut at the data was written in August of 1989, and a work plan for detailed analysis published in September of 1989. But the quantity of data was simply too large for analysis by the available tools, and other priorities interrupted work. After most of the definitional and mechanical problems were solved, a new work plan was published in March of 1991. It was circulated for technical review of the sufficiency of the approach and approved by the Assistant Director.

I. Congressional Request

On February 11, 1991, the Chairman of the Subcommittee on National Parks and Public Lands requested that the Director of BLM provide written responses to follow-up questions regarding personnel management issues. Item 1 of the list requested a copy of a demographics study which had been discussed at a hearing held by the Subcommittee the previous April. Item 2 of the list asked if there was a bulge in the demographics of the workforce of BLM, and if this creates specific management concerns. BLM's written response assured that a study would be forthcoming. And On April 3, 1991, the Director provided testimony at the Oversight Hearing on BLM/NPS Personnel Issues in which he indicated that this study had been undertaken.

J. Excluded Topics

The following valuable areas of analysis will hopefully be addressed in subsequent reports, but are not part of this report:

> State by State analysis; analysis of blue collar occupations; trends in occupations with fewer than 50 people; the interactions of various demographic variables such as sex, race, and education, and the result that has on grade by occupation (multivariate analysis); affirmative action categories or standards of adequate representation; workload or projected need for various occupations; or the

projected impact of recent reorganizations or changes in program emphasis or personnel policy.

XIII. METHODOLOGY

A. Nature of the Problem

In most studies the difficulties are generally in collecting data, analyzing it, and identifying workable solutions. Quite the opposite is the case in this study. The data had already been collected in PayPers; the difficulty was in defining and extracting it from the huge master file. The analysis of demographic data is fairly straight-forward; the difficulty was in manipulating and presenting it so that the patterns are visible. Identifying the means to correct imbalances is also fairly straight-forward; the difficulty is in determining an appropriate ideal for each occupation, then coordinating recruitment so that the long term and short term needs are appropriately balanced, work that is yet to be done.

B. General Approach

The major steps in this study were to: download the PayPers Combined File and Month End Action Tapes to the BLM mainframe computer; select combinations of data elements from these files (working definitions) to identify the desired variables; build working files containing only the desired data formatted in SPSS (Statistical Package for the Social Sciences, a standard software package on the BLM mainframe); produce printouts for analysis; produce appropriate charts from these printouts using Harvard Graphics software so that the complex data relationships can be seen; write up the analysis; get the draft analysis appropriately reviewed; and finally publish this report. Each of these steps involved a number of difficulties.

The following somewhat technical description of these steps is provided not only as the usual "audit trail" to allow the reader to assess the accuracy of the data, but also to assist future studies in moving quickly through the data manipulation stages.

C. Downloading Data

The basic data was provided by Bureau of Reclamation in Denver, which provides computer support to the Department of Interior for PayPers. Two sources of data were used.

The PayPers 1990 Combined File (the basic personnel record for each employee) for BLM contains 568 fields with about 2,800 characters per record (= person), for about 16,000 records. The tape of this data consisted of about 45 megabytes of data, and filled an entire tape (recorded at 6250 bits per inch). One pass through this data to produce the working tape required about one hour of CPU (central processing unit) time on the BLM mainframe computer. The resulting file contained about 20 data elements for 9,015 records. SPSS converted the ASCII data to binary, which speeds computation. These steps reduced the CPU time required for a single pass through the working file to about 20 minutes.

The Month End Action Tapes (a simple record of all the personnel transactions of a month) consist of 148 fields with about 450 characters per record (= individual personnel action), for about 70,000 actions per year. Tapes from 1988, 1989, and 1990 were downloaded. The tape of this data contained about 32 megabytes of data per year, a total of 96 megabytes. Constructing the working tape was more complex than for the PayPers Combined File because more constraints and more recoding was needed. The result is that one pass through this data required about 2 hours of CPU time on the BLM mainframe computer for each of the three tapes. The recoding and selection of data elements reduced the working tape combining all three years to about 20 elements for about 10,000 records. This reduced the CPU time required for a single pass through the working file to about 15 minutes.

While it is technically possible to do the above analysis on a personal computer (PC), assuming it has a tape reader and can be dedicated to do nothing else for days at a time, it is obviously much more efficient to do this work on a mainframe.

D. Working Definitions

The PayPers system does a good job of identifying the current status of an individual and the specific type of the most recent personnel action. But the definitions of personnel actions are very narrowly drawn, while workforce analysis needs broad categories so that overall patterns are visible. For example, there are numerous types of pay plans which must be reduced to the two different ways of computing retirement eligibility. This problem is particularly severe in the Nature of Action (NOA) codes, which not only have dozens of minor variations of the same type of action, but they also do not show the full impact of a transaction. For example, NOA code #130 - Transfer, may or may not include a promotion and a change in career field along with the transfer, and does not identify whether the individual is a new hire to the agency. As a result, a simple tally of transactions by NOA codes does not give a full picture of what happened. This means that reports taken from the PayPers data must establish working definitions of what happened by combining several different conditions.

For purposes of this study, an employee was rated as "permanent" if, and only if, they met all four of the following criteria: position tenure = P (this eliminates temporaries); job series less than or equal to 2199 (blue collar or wage grade positions are coded with higher numbers); pay plan = ES, EX, GS, or GM (this eliminates GW which is blue collar and some small categories); and retirement = C or F (CSRS or FERS, the two options available to full time employees).

For purposes of this study, NOA codes are categorized as follows: any code from 100-199 was treated as a new hire; any code from 300-399 was treated as leaving; and any code from 500-599 was treated as a conversion to permanent. As a practical matter, most of transactions took place using only a few codes from the ranges listed above.

E. Retirement Eligibility

The computation of retirement eligibility is difficult because of differing thresholds. The National Park Service has developed a program to make the calculation, which was made available to this study. The resulting eligibility dates were then combined to give a total for the workforce by year.

F. Recoding

The educational codes were grouped as follows: 1-9, 10-12, 13-16, 17-20, and 21-22. Supervisory status 1-6 was combined. Pay Plan EX was grouped with ES. NOA codes 9VV, 9WW, 9XX, 9YY, and 9ZZ were all combined as 999 (which was then disregarded). Race codes A, B, C, and D were all grouped. Retirement codes R, T, E, 1, 6, and 7 were all grouped as C. State codes were grouped so that the Training Center was grouped with Arizona. These recodes were reviewed by every level of the BLM Personnel staff.

G. SPSS Reports

With the combined file data, the following tabulations (frequency and valid percent) were used to produce this report: office level (RA, DO, SO, AK, SC, FC, and WO); State (AK, AZ, etc.); sex; race; grade; PATCO; college degree; supervisory status; and retirement group (years to retirement eligibility grouped by 5 year increments). Most combinations of these were run as cross tabulations.

With the month end action tape data, the same tabulations were used to produce this report. In addition, cross tabulations were run comparing the number hired and separated by 5 year groups of retirement eligibility for the total, the PATCO categories and the occupations with more than 100 employees. Similar cross tabs were run by grade.

The thickness of this report is in part a function of the large number of occupations in BLM with more than 50 people. But the general point is that it only takes a few variables to get an insightful picture of the demographics of an organization.

H. Accuracy of Reports

Over time, various definitions have been developed for the numerous standard PayPers reports, and it appears that some of the older standard reports use different definitions than some of the newer ones. This creates some difficulty in comparing reports for accuracy.

In addition to the problems with definitions, some data elements are missing from the PayPers records. This means that totals are frequently slightly less than 100%, particularly those which combine two measures.

In addition to the problems with definitions and missing data, some data elements are diligently kept up to date while others are not. For example, personnel specialists indicate that education data is rarely updated. The EEO office has identified that the minority designator code for some individuals is thought to be inaccurate but current OPM regulations constrain management's ability to revise the data. As far as PayPers is concerned, you are whatever you say you are.

The PayPers system is so complex and the documentation is so voluminous that only a handful of people understand how to build a new report. Thus great care was taken to build redundant working definitions using only the most reliable data elements. The working definitions were carefully reviewed by both BLM and BOR PayPers technicians. The working definitions selected were the ones they recommended as most reliable, even though some are different from those used in standard PayPers reports.

As a double check, experimental working files were built using the working definitions from various standard PayPers reports instead of those developed for this study. The results were very similar to the data reported here, suggesting that any differences are minor.

These precautions should make the data presented reliable as far as it goes, but the precautions also mean that a few individuals will be left out of the reports because of missing or invalid data elements, and some of the results may diverge slightly from other reports generated by other definitions. The number of individuals left out of a cross tabulation because of missing or invalid data elements was rarely higher than 150 out of 9015, about 1.5%. The extent of divergence from other reports is impossible to pinpoint in advance, but based on the double check described above, the divergence is expected be well below the threshold of significance for an overview. This report's focus on only the larger scale features reduces the concern with such slippage. The emphasis here is on larger trends, and the data is more than adequate for this purpose.

While the likelihood of such slippage should be noted, it should also be noted that this report contains none of the error usually associated with statistical projections. All of the data in this report is based on complete enumeration rather than a projection. Every data point is associated with a living individual with a unique social security number.

I. Privacy

Extensive efforts have been taken to protect the privacy of the BLM staff portrayed in this report:

the work plan and data needs were reviewed by a panel including Personnel staff; names were not downloaded from PayPers, unique identification was ensured through social security numbers; occupations with fewer than 50 individuals are not broken out; minority racial groups are not broken out; percents rather than actual numbers are used where ever possible; cross tabulations which could be used to triangulate individuals were avoided; and care was taken not to uniquely identify individuals in the text of the report.

J. Major Occupations

Since no occupation in BLM accounts for as much as 5% of the workforce, 'major' was arbitrarily defined as those occupations with more than 50 workers. This turns out to be a total of 37 occupations. These 37 cover about 85% of the total permanent workforce. A breakout of the occupations of the remaining 15% would require an analysis of more than 100 additional occupations, many of which have so few employees that it would be difficult to fully report while protecting their privacy. Five occupations with more than 50 workers were inadvertently left off the list for in-depth analysis.

K. Quality Control

An earlier draft of this report was reviewed by the BLM offices of EEO and Personnel as well as by the demographics specialist of the Departmental EEO and Personnel offices. All of the changes they recommended were incorporated into this current draft.

However the hypotheses, techniques, and issues in this report are sufficiently new and untested that this report is being issued in draft and widely distributed to allow a thorough review. If you have views on the methodology, data, analysis, conclusions, implications, need for further study, or any other aspect of this report, please send your written comments to:

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BLM demographics, 1991
baseline data

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